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ACCOUNTING AND OFFICE METHODS

DIRECTOR OF INDUSTRIES

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PART I—ORGANIZING YOUR OFFICE

Making Work Profitable

INTELLIGENCE alone, in the direction of labor, makes it profitable, dignified or noble. That intelligence which directs it may be either your own or that of others; to the extent that it is yours, you will get the full value that is produced by both your labor and your intelligence. To the extent that it is the intelligence of others which directs your labor, you must share with the others the value of what is produced.

Do not confound labor directed by intelligence with expert or skilled labor, which may be performed in a wasteful, unintelligent and perfunctory way. Expert or skilled labor, when working on the separate units of a large structure, or on a large organization, must be directed by a supervising intelligence, in order that the separate units may be brought each into its proper place, with as little indirection or loss of effort as possible.

Intelligent labor, or intelligent direction or organization of labor, is that which enables you or others to produce greater results with less or at least the same amount of labor.

THEODORE N. VAIL

President, American Telephone and Telegraph Company
President, The Western Union Telegraph Company

I

OFFICE FUNCTIONS AND DEPARTMENTS

By William R. Wilson
Consulting Accountant

WHATEVER your business, your office forms a unified division, independent of the other divisions and yet working in close relation with them because it handles their transactions. Its organization must be such as to promote the greatest accuracy and dispatch in the operation. Yet this very unity and independence of organization is hard to attain and must be constantly watched because the work of the office so frequently overlaps the activities of both the production and sales departments.

The first thought that arises in connection with any organization is that it must have a controlling head over the work and the workers within its jurisdiction. Such a head the office has, usually called the office manager. He is the employer of all the office labor, has disciplinary control over it, and supervision of the work done by it.

This does not mean that the office manager is the superior and "boss" of all the individuals within the four walls of the office. There are certain officials whose work necessitates their presence in the office who are nevertheless either independent executives directly under the general manager and, therefore, of co-ordinate rank with the office manager, or who belong to one of the other departments of the business. Thus, the purchas

ing agent usually has a desk in the office and his clerks are under the disciplinary control of the office manager; yet he is more properly an executive of the producing end of the business, and the office manager has no authority over him. Similarly, the sales manager, while occupying the office and having his subordinates in the office force, is in charge of an independent branch of the business. The credit man, too, is a part of the office and yet not himself under the office manager, but either an independent executive under the general manager, or a part of the sales department. The office manager has no authority over these executives, but he has general control over the clerks and subordinate employees who perform the clerical work in connection with these various offices. Very frequently the head bookkeeper in direct charge of accounting, or the chief clerk in direct charge of all correspondence and records, or the credit man, holds the position of office manager.

DIVISIONS *into which the work of an office is divided—the duties and functions which are ordinarily assigned to each of the seven departments.*

Office work divides itself into two general divisions: first, that relating to accounts, having to do with the making of the records of the concern's transactions; and second, that which is purely mechanical, recording or clerical, having to do with the mere forwarding of business transactions.

As modern business has developed, this work has come to be divided into seven principal parts, which become sub-departments of the office. Their functions are as follows:

1. The Purchasing Department—the handling of records attendant upon keeping track of quotations, prices

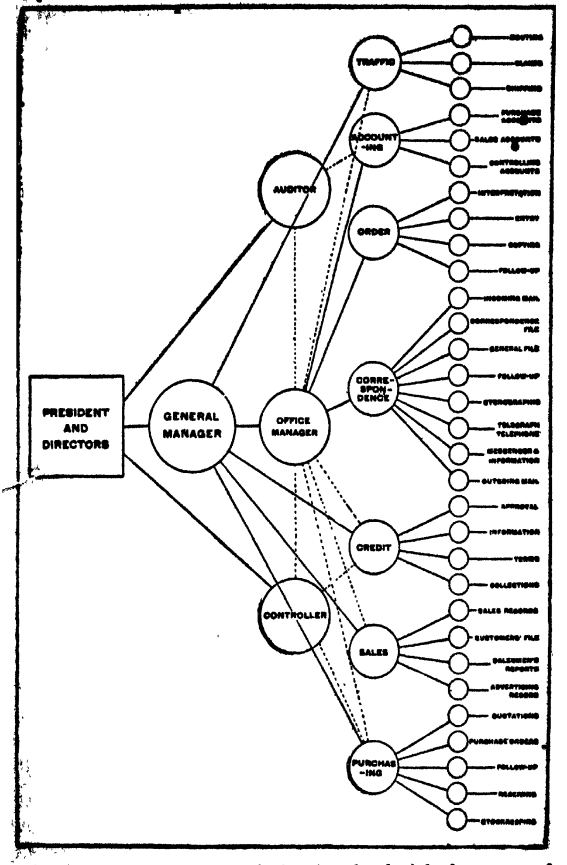


FIGURE 1: This chart shows the function of each of the departments of the office with the lines of control which bring details to a focus at the proprietor's desk

and other data; the making out and following up of purchase orders; the records showing the receipt of purchases; the stock record, and the process of payment for purchases.

2. The Order Department—the entry and handling of sales orders as they are turned in by the sales department or received from customers, and all records attendant upon the proper handling until the transaction reaches the accounting department.

3. The Sales Department—the clerical work of handling sales records, the follow-up and other data which the sales manager wishes to keep analyzed.

4. The Credits and Collections Department—the handling of the order from the standpoint of gaining information regarding the customer: recording, filing and handling this information; bringing in money due.

5. The Accounting Department—the handling of money and the records pertaining to it, the making of all original entries, the posting of all accounts, the bookkeeping records of all transactions with persons who have money relations with the business, the care of the general ledger, the making out of reports and statements of business.

6. The Correspondence Department—the opening and distribution of incoming mail, the handling of correspondence, the filing of all letters, follow-up work attendant upon general correspondence, the general stenographic, typewriting and filing work of the office, the handling of outgoing mail, the telegraph, telephone and messenger service, and all work pertaining to communication.

7. The Traffic and Shipping Department—the records and data needed by the traffic manager and head shipping clerk bearing on their work, and for the rout-

ing of shipments and adjustment of claims.

Each of these departments will be described in full under the proper headings. The purpose here is to show their general functions and the relation they hold to each other.

At the head of each department of work in the office is a manager for that department. As in the case of the office manager, this does not necessarily mean that each official has charge of one department and one only.

DUTIES *of the purchasing department—the organization essential for the proper keeping of stock records and the satisfactory placing of orders.*

Very often the purchasing agent, for instance, combines with his work the duties of traffic manager, or the chief bookkeeper is also head of the correspondence department and of the order department. The point is that every office has these seven classifications into which its work is divided.

The chief duties of the purchasing agent are to buy the goods needed by the concern. The work of the purchasing agent divides itself into five departments:

First, collection of all data regarding quotations, prices and purchases.

Second, the making out of the actual orders for purchases.

Third, the follow-up of these orders to see that deliveries are made on time and to take care of whatever changes may be demanded in the purchases.

Fourth, receiving goods and seeing that they are correct in quantity and quality.

Fifth, stockkeeping, the handling of records which show the amount of stock on hand at all times and the keeping up of the stock.

The well-organized purchasing department has, in addition to the purchasing agent as manager, an assistant. The work of the purchasing agent is to buy—to keep track of prices and markets and to find the right material at the lowest price. As much of the clerical work as possible should be done by his assistant. The purchasing department should also have a clerk to gather and keep records of the various data mentioned under the first division of the purchasing work and another clerk would act as stockkeeper. This is the average and ideal personnel of the purchasing department. It may be restricted to the purchasing agent and one assistant, or it might be expanded into a dozen assistants and a hundred clerks.

ORDER *and sales department work in the office falls into the routine of processing incoming orders so as to effect prompt and efficient deliveries.*

The order department is very often a subsidiary department of the sales division of the business, inasmuch as in some organizations all the work of entering the order is put upon the sales department and from it are supposed to come, on the one hand, the instructions to the plant or warehouse to fill the order, and on the other the data needed for making the proper entries on the books. The manager is in charge of the clerical force in the department and he is the first to receive the sales mail as it is distributed in the morning. The work of this department is to make proper and complete entry of the orders from customers, to see that instructions go to the plant or warehouse for filling the orders, to the shipping room for forwarding, to the accounting department for entry on the books, and to the sales manager and credit man for their records.

The work of this department is divided into four parts:

First, the interpreting of the order, which is usually done by the manager or his assistant.

Second, the entry of the order, which is handled by the clerks with the proper appliances.

Third, the distribution of the copies to the proper departments of the business.

Fourth, the following of the orders to see that they are filled and the order made ready for billing to the purchaser.

The personnel of the department includes a manager, his assistant, who is his understudy in case of absence and who also attends to the work of passing the orders, the entry clerks, the checking clerk, who checks the orders against the customers' letters and sees that the copies get to the proper departments, and the follow-up clerk. Here again, the duties can be so combined that all the work is done by a manager and one assistant, or extended to a dozen executives and hundreds of entry clerks.

The clerical and recording work of the sales department is so closely related to the work of the actual selling that it is difficult to describe the carrying on of clerical work without describing also the organization of the sales work. The clerical work of the sales department divides itself into five parts:

First, the record of sales, which every sales manager wishes to keep and which he secures daily from the record of sales that comes to him from the order department.

Second, the records the sales manager keeps concerning customers, their standing and their purchases from his house from month to month.

Third, the records of salesmen, including both the history of the salesman and an accurate record of his sales for the house and his expenses.

Fourth, the handling of the salesman's expense accounts.

Fifth, the handling of records of the advertising department, which include, first, the records of returns from keyed advertisements in different mediums; and second, the follow-up work, which takes up the big subject of the handling of letters and the follow-up. The organization and working methods of the sales and advertising departments are fully described in other volumes, and therefore need not be further elaborated here.

The credit and collections department is most often a distinct department of the office, although sometimes it is looked upon as a sub-department of the sales division. At the head of this department is the credit manager, whose work divides itself into four classes:

First, to approve or disapprove of all orders received.

Second, to gather complete information regarding customers and prospects.

Third, to fix the terms of sale and the limit of credit for all customers and sales.

Fourth, to make collections from customers.

Bearing on this work, the credit manager has an assistant who usually handles the routine of gathering facts, keeping up the information files, and acting in the absence of the manager; a collection manager who is in direct charge of carrying on the collections; stenographers for handling correspondence with customers; a clerical force for keeping up the records in the information files, and also the records which the credit manager wishes to keep regarding the sales to customers; and clerks in the collection department to handle the

collection credits and collection follow-up.

The accounting department is the heart of the business organism because through it, at one time or another, must pass every transaction, from the largest to the smallest, from first to last, of the whole business. The function of this department is to handle work classed as bookkeeping. At the head of the department is the chief accountant, the man responsible for the organization of the accounting department, who is in direct charge of the general ledger.

BOOKKEEPING *and accounting furnish the history of a business and the records on which future developments are based—right plans of organization.*

The work of the accounting department divides itself into entries concerning purchases, entries concerning sales and entries for the controlling or financial accounts of the business. It is, therefore, natural that in the well-organized office, one sub-head, the purchase bookkeeper, who is in charge of the purchase ledger, will in turn have under him the purchase order and invoice clerk to handle the invoices as they come in, check them against the receiving record, and prepare them for proper entry on the books; a disbursement clerk or cashier, to handle the disbursing of all moneys, whether by check or cash; a payroll clerk, whose title explains his work, and a security or auditing clerk.

The sales bookkeeper will likewise be in charge of the sales ledger and will have under him an order and sales record clerk to attend to the filing and checking of orders as they come in from the sales department; a cashier to attend to the handling of the money; and a checking or auditing clerk.

Financial and controlling accounts, covering large

items such as real estate, depreciation, stock and bond issues, dividends and reserve fund, which come close to the heart of a business, are entered in the general journal. This book is usually in charge of the head bookkeeper or of his confidential assistant.

Modern business methods have greatly systematized and simplified the work of the accounting department. Many of the complications and much of the elaboration of the old-time methods have been done away with, making most of the work of a clerical and mechanical character, requiring less expert bookkeeping and accounting. At the same time, the results have been made more certain, the work itself is more accurate and economy of time has been secured.

The accounting department is the most likely of all the departments to vary in organization and personnel in different businesses. Very often in cases where the cash business is large, either from purchases or sales, the purchase or sales bookkeeper himself holds the title of cashier and handles all money. The head bookkeeper sometimes holds the title of cashier and attends to not only the general ledger, but the sales ledger also. Whatever line or classification of duties the character of the business may call for, however, these same duties occur in every business.

TRANSACTIONS *never originate in the correspondence department, but its efficient control is essential to the smooth running of any business machine.*

In any transaction, communications pass between different employees in the business and between the house itself and outside concerns or individuals. The handling of all such communications lies with the correspondence or communication department. This department is

peculiarly without initiative power, for its head, as a rule, has no control over what letters shall be written, or how they shall be written. He merely handles the mechanical details of this work of the business.

At the head of the correspondence department is a manager whose work covers eight divisions:

First, the handling of incoming mail. This is in charge of the incoming mail clerk, who has various clerks helping him in the opening of the mail, in its classification and distribution to the various departments and individuals in the business, and in making the records, which will be described in connection with mail opening.

Second, the filing of all correspondence, including the letters received and carbon copies of letters sent out.

Third, the handling of the follow-up on correspondence for the different departments of the office.

Fourth, the general filing for all departments of the office, including such items as contracts, receipts, copies of orders, and other records. All this filing and follow-up work is usually put in charge of a head filing clerk, who is directly under the manager of the department in charge of the filing clerks.

Fifth, the handling of the stenographic and typewriting force used in the office. This work is usually in immediate charge of the head stenographer.

Sixth, the gathering and sending of outgoing mail, in charge of the outgoing mail clerk, who has assistance in proportion to the volume of work.

Seventh, telegraph and telephone service, which is usually put in charge of the telephone operator.

Eighth, the messenger service, consisting of the proper interhouse messengers and also the messenger boys who carry communications outside. These are usually in

charge of the information clerk (frequently the telephone operator), who has a desk at the entrance of the office and meets all its visitors.

The traffic department dictates the routing of all shipments, makes arrangements with the transportation lines for rates and services and handles all claims against the transportation companies. Sometimes, though not always, the shipping department is a sub-department of the traffic department.

At the head of this work is the traffic manager. In a concern of average size, he has an assistant who performs the work of routing and of handling the records, a claim clerk who handles the records of claims, and a head shipping clerk, to take charge of shipments.

ADDITIONAL *functions in the routine of office work fall upon special executives—definite division of duties places the responsibility for mistakes.*

The office organization here described, with its departments and managers and working personnel, is competent to carry on the commercial and clerical transactions of any business. But there are certain general and advisory work to be done and certain officials necessary to complete the organization.

One of these is the controller. His duties may be assumed by the office manager, the chief clerk, the treasurer or any executive. He has absolute power over disbursements, which he uses as a safety check upon the purchasing department. All purchase orders pass over his desk for approval before they are sent to the purchasee, and he can change or cancel them or get further information regarding them at his discretion. His prime duty is to protect the funds of the business, to act as a watchman over its finances, and therefore upon

n rests the responsibility for seeing that the business in good financial condition and has the cash on hand r its transactions. His power extends even further an a check on the purchasing agent. He is a check on the plant superintendent and, in fact, upon the nole business organization; and he is responsible to the ard of directors alone. If the credit man is taking out larger total of accounts than the house can safely carry is extending terms that are longer than the finances the house will allow, the controller can limit him.

In addition to the controller, many organizations inade an auditor, whose duty is to examine the records the accounting department and report to the president d directors regarding their condition. This function sometimes performed by the controller and sometimes e head accountant is called the auditor, although rankg with the rest of the heads of departments and subdinate to the controller.

Neglect to make someone in your business definitely sponsible for each of these various duties is to invite ror or loss. Knowing these tested lines of organizaon, the chief in his office-planning and the department ad in his place can make sure that all essentials of the ork are in hand and can adapt this tested arrangement functions to any peculiar need of store, factory or ofessional business.

HAVE *a well-considered system of doing things, definite and business-like in all departments, not an imitation of something else, but one designed for your own use.*

—John Calder
President, International Motor Company

II

ARRANGING THE OFFICE FOR EFFECTIVE WORK

By Wesley A. Stanger
Sales Manager, Royal Typewriter Company, Chicago Branch

LOST motions in the sales office were recently found to be devouring the profits of a well-organized factory. The manufacturer was confronted with what seemed to be an impossible condition: the difference between the manufacturing cost and the selling price of each unit of product was 400 per cent, yet he was not making money. He had to borrow to keep going.

The manufacturing cost was known to a nicety. He could not reduce the quality of raw material, cut the pay roll or reduce the number of evolutions necessary to turn out his product. He had had the not unusual experience with unproductive salesmen, but this factor of his costs was not abnormal. He could cut down somewhat on the selling expense, but saw no other place for economy.

Finally he turned his attention to the office. Here he soon discovered that it cost more to bill, charge and collect on each device than to advertise it, and considerably more than to manufacture it. Here was the leak; he was using an antiquated and laborious system. Calling in an expert, he learned that lost motion and double steps kept several employees busy doing what would have been simple for one to do under correct arrangements.

When the expert was through, the manufacturer co-

cupied a smaller office. His rent was reduced. He had installed new systems but they were paying for themselves out of the saving in rent. His pay roll was less than formerly and his office was so arranged that everything worked with the same precision as in his factory. From that day he made profits instead of deficits.

FACTORS and principles which help to make the arrangement of the office effective—working plans in which all space is used to the best advantage.

The need for care in laying out your office is at least as great as in laying out your factory. It is not always possible to have free choice in the location of the office. Relations to a particular business district or to a factory may preclude this; but whether one is free to choose the building best suited for his needs, or must fit in with the factory plant, he should as far as possible observe the following essentials of effective office arrangement:

1. Light, ventilation and quiet.
2. Accessibility.
3. Privacy.
4. Cooperation of occupants.
5. Continuity of operation.
6. Business impression produced upon visitors.

Light and ventilation are the prime factors in determining the efficiency of employees. Their presence is absolutely necessary for accurate and capable work. The office, too, should be as far from outside noises as possible. The tumult of street cars and elevated trains, heavy wagons rattling over the pavements, automobile horns, policemen's whistles—these and the thousand other noises that go to make up the confusion of a busy street, distract the thoughts and wear down the strength of even the most energetic in the course of a long day.

In a business district these distractions can best be avoided by renting space in a high building, where the office is well removed from the street. In such an office, also, light and air are not excluded by the surroundings. A factory office should be in a detached building if possible, or at least far away from the heaviest machinery.

In most offices the arrangement of furniture seems largely a matter of chance. Desks, typewriters, benches, filing cabinets, are all huddled against the four retaining walls, and the middle space is left vacant. But vacant space, at $1.50 per square foot a year, is not a producing factor. In plotting a room, the desks should be arranged in the center, where access is free from all sides. Wall space is better for filing cases which need to be approached only from one side. A neat alignment of desks in rows with regular aisles secures the greatest economy of space with an appearance of order that is effective for business atmosphere.

Use partitions sparingly, if at all; even railings impede the free movement of an office force. The space which they take up and the necessary aisles on each side, can be used more profitably. Every swinging door or gate takes up nine square feet of space. Without partitions the entire force is at once brought under the eyes of the office manager.

Where partitions must be used, they should be made as low as possible, so as not to interfere with proper ventilation. Panel partitions are the most desirable for private offices. These consist of interlocking sections about thirty inches wide by seven feet high, the upper portion being of clear or ground glass to permit the free passage of light. The space above these partitions allows the air to circulate through the entire room without hindrance. In a factory office, where heavier con-

struction is desirable, the partitions may be made of expanded metal lath, erected on three-quarter inch channel iron, plastered on both sides.

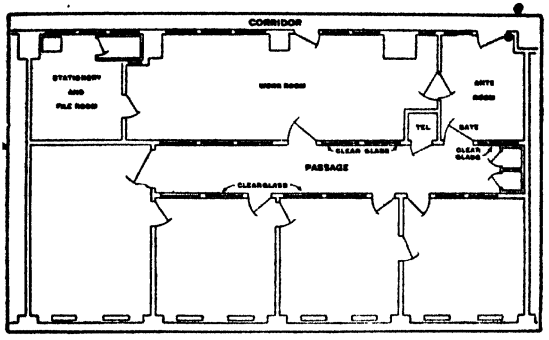


FIGURE II: This office layout is planned to secure the greatest accessibility for the public and the highest cooperation between departments. Clear glass partitions secure privacy without shutting off the light

The location of stenographers' desks is a problem in every large office, and its solution is largely a matter of the special requirements of your business. Whether it is better to assemble the stenographers in a central room and assign them individual tasks as they become available, or to distribute them about the office, each correspondent and department head having his own stenographer, is a question the answer to which depends largely on the character of the business and the conditions under which correspondence must be handled. One man with constant detail to handle wants his stenographer close to his desk, acting somewhat as a private secretary, while another wishes the typewriting done out of his hearing.

The principles on which your decision will hinge are: frequency of your dictation calls, number of executives

served by the stenographer and working conditions most favorable to each, convenience of typing room to the business desks, diligence and control of the stenographic force.

For every business, the arrangement of the office is of prime importance, and a man should know the principles of good arrangement and apply them as far as possible to his own business. The relations between departments and officials will, to a great extent, influence the location of their work. But the placing of one department or executive must not interfere with the proper distribution of light and air to other departments and employees.

Every office needs a lobby or reception room. The place for this is just inside the main entrance. In offices where visitors are not often required to wait, this may be reduced to room enough for the desk of the information clerk, who is often the telephone operator. Near the main entrance and opening on the reception room, if there is one, should be the offices of the men who are most likely to receive callers.

LOCATION *of each department and executive should bear a close relation to the kind of work performed and the connection with the rest of the business.*

Some executives make themselves as inaccessible as possible, establishing their offices at a distance from the entrance and hedging themselves about with secretaries and stenographers. The ideal place for the executive, however, is near the main entrance, and a tactful clerk may guard him there against intrusion as effectively as though he were in the farthest corner of the establishment.

The officials who by virtue of their work come most

in contact with the public, are the purchasing agent, the cashier, the credit manager and the sales manager. The shipping and receiving clerks, on the other hand, are generally located near a rear entrance or a freight ele-

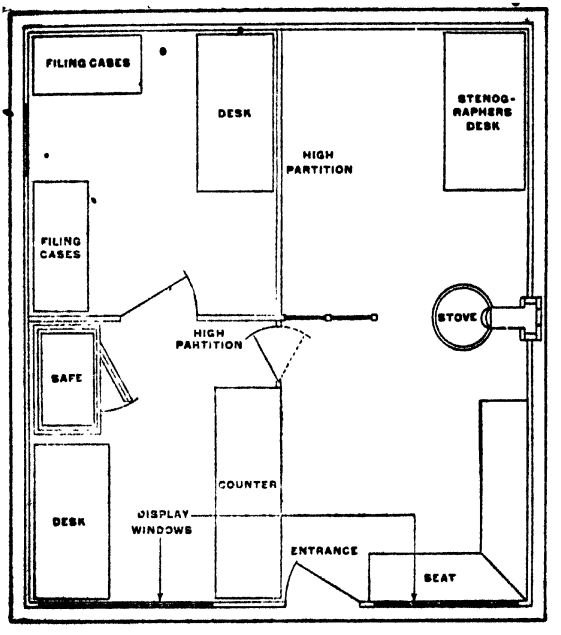


FIGURE III: A real estate dealer planned the above layout to use every inch of space in a small room. The arrangement is compact, but the three offices and reception room meet every need

vator, so that their work need not obstruct the reception room.

Your order and entry departments should be near to-

gether, not far from the incoming mail clerk and close to the files of the order department. The bookkeepers should be near the cashier, the billing clerks near the bookkeepers, the order clerks near the billing clerks. In the accounting room, the purchase bookkeeper should be accessible to the purchasing agent and his invoice clerk, the sales bookkeeper to the sales manager and the credit manager. The stores department must be in close touch with the purchasing department to avoid duplication of records, and the disbursing clerk near the stores department. The timekeeping and employment bureaus are closely allied with the cashier's office and can with advantage be located near it.

How all these factors are combined in a scientifically arranged office, planned to get the most out of the floor space, and at the same time afford the greatest accessibility to the public, the highest development of cooperation between departments, and the best distribution of light, is illustrated in Figure II. The entrance to the suite is at the extreme end of the hall, where the anteroom is located; at the right is the general office, and on the left are the private offices, all of which have outside corridors.

Glass partitions separate the offices from the corridors so that there is no lack of light in any part of the suite. Ventilation is easily secured by use of the windows and transoms. Secrecy may be maintained in any of the private offices by closing the doors, yet without shutting out the light from any other section of the office.

How these principles can be enforced in the arrangement of the small store or shop office is shown by the experience of two men who started as partners in the real estate business in a suburban town. They found that the best location they could secure was a very small

store room near the railroad station. Its value, from their point of view, lay in the fact that it stood directly in the path of the class of people they wished to attract —business men who went daily to and from the city

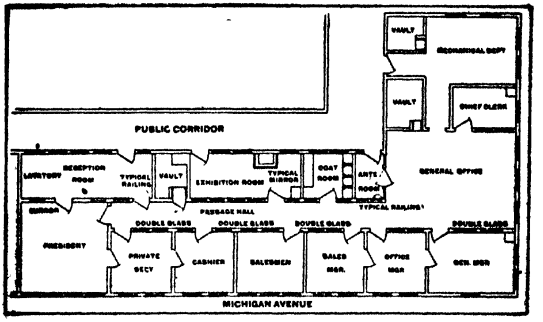


FIGURE IV: In this office, work is carried from official to official in a straight line. Retracing of steps is to a large extent cut out and lost labor is minimized

In spite of the small space at their command—the room was only 14x16 feet—they found they were able, by careful arrangement, to make it conform to their needs. Figure III shows how they succeeded in making of this compact room an attractive, business-like office.

One quarter was partitioned off to secure privacy in the transaction of intimate business. Besides the desk, this private room was made to contain the correspondence files and a visitor's chair. The reception room occupied the quarter diagonally opposite, just inside the door. Across the counter, next the door, the necessary routine of sales and collection was transacted with the public office. The stenographer was located in the far quarter of the room, convenient as an information

clerk and yet partially shut off in an office of her own by the stove and a low railing. Two large front windows gave valuable display room and at most times, plenty of light. Results showed that this careful layout furnished ample space for business with neither lost motion nor overcrowding.

EXAMPLES *of offices in which the fundamental principles of arrangement are followed out to secure the prompt and effective handling of all work.*

In the thoroughly well arranged office, continuity of operation is essential. An example of a layout for direct routing of work is shown in Figure IV. Every process of office work is carried on in a straight line, with as little lost motion and retracing of steps as would be found in a modern lathe room. The processes so follow each other and the departments are so located that the idea of continuity is at once apparent. No department retards or interferes with the work of any other. The minute there is any slow-up, it is easy to find in just what department delay is occurring.

The office manager, by the location of his own room opposite the main entrance, can keep tab on all business passing in the general office. Next to the office manager sits the general manager with the door of his office also leading into the general office. Opposite the general manager and adjoining the general office is the auditor, and in a line with his door stands the vault. A narrow passageway leads to the drafting room, which is separated from the entrance, maintaining its privacy.

Left of the main entrance is a long hall with offices leading away from it. The salesmen's room is located near the exhibition room where the samples are kept on display. The sales manager has the office next to the

salesmen. The president of the company is located at the end of the hall with his private secretary conveniently near. This arrangement secures quick handling of routine work.

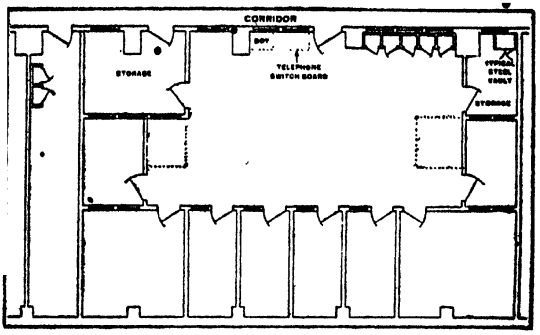


FIGURE V: A large reception room, such as this office provides, gives the visitor a favorable impression. The row of private offices suggests large operations, and has the same value as a strong advertisement

Next in importance to convenience for the employees is the general impression which an office makes on a visitor or prospective customer. This impression has much the same effect as the personality and dress of a salesman. What the caller is able to see from the reception room may cause him to form unconsciously an opinion of the business either favorable or unfavorable.

For this reason a wise executive arranges his office in the manner most appropriate for his business. A bank usually plans for stability and soundness in its architecture and conservatism in its office arrangement. In the real estate office, the arrangement of desks, maps and safe deposit fixtures, emphasizes in a practical way the solid business operations of the concern.

In this, you need make no attempt at extravagant show; to make the "office dress" bespeak prosperity or magnitude is less effective than to plan for maximum efficiency and let this speak for itself. The office should in every way reflect the true merits of the concern—should wear the business-like working clothes of an efficient enterprise. Order, neatness, stability and business taste should be the fundamental factors in determining the arrangement.

An office giving this good general impression is shown in Figure V. The reception room is large and the private offices lead away from it on three sides. A visitor can take in the entire scheme at a glance, and the rows of private rooms which he notices suggest magnitude in operations, especially when the occupants are frequently passing out and in.

It is not possible to lay out every office on the lines given above. The size and shape of the room require departure from any ideal. But when the offices and desks are arranged as far as possible so that the processes of business take a direct route and their location is such as to offer the best possible facilities for light, ventilation and quiet, you are reasonably sure of greater efficiency, and less confusion and loss of time.

IN BUSINESS *this is the day of system. The business man who trusts to chance and circumstance finds his way beset with those obstacles which like reefs have gathered many business wrecks upon their crests.*

—Jeremiah Dwyer
Founder, Michigan Stove Company

III

CONTROL AND MANAGEMENT

By Charles E. Cake

AS a business outgrows one-man supervision, the wise executive plans for the focus of essentials at his desk. The president of a large organization is an impersonal executive. He is made so by the great amount of detail which must be done by a corps of assistants. To see personally all these assistants would, in the first place, disturb system, and in the second place, render impossible any careful supervision of a great business. In rare instances only do the subordinate employees of the company come in personal contact with the president. Seldom does the department manager, who is a lieutenant to the executive, carry the matters of his department direct to the president, and yet every movement that these assistants make is by order of the president.

It becomes necessary, then, to handle this detail through a particular method which will enable the executive to receive information upon the progress of the business and then direct its operation. This is really the basis of executive system, and it can be so perfected as to bring to your business both definiteness and precision.

An excellent example of a business organized with this aim of focusing details is found in a large middle west concern. This business is divided into fifteen gen-

eral departments. These departments of the general o fice operate the eight districts, which, in turn, embrac the numerous branch houses of the company situated a every important commercial point in the United States, as well as the firm's foreign interests.

EXECUTIVE *committees are guided by department and district reports in which every non-essential is brushed away and only the big tendencies are shown.*

The problems, policies and results of these various departments, districts and individual branch houses are concentrated in the executive committee, composed of the secretary, vice-president, treasurer and general manager, with the president as chairman. This committee is the cabinet, meeting every morning in the president's office at eleven o'clock. All important matters and policies are considered at this meeting. It is a summary of the results of the past twenty-four hours and a source of instruction and inspiration for the following day. Here again is evidence of the need to concentrate all detail in order that the president may grasp the workings of every department without having to analyze the reports.

The departments, which are general in character, report to the officers forming the executive committee. These officers, therefore, are fully versed in the operation of the business before they go to the committee meeting. The president is thus enabled each morning to receive from these lieutenants full information in a few minutes' time covering all departments.

The department managers are trained specialists, because the matters coming under their jurisdiction require that they be thoroughly conversant with the affairs of their respective departments. The district manager is a

generalist, because he concerns himself with all the phases and details of the branches under his charge.

The department managers are usually stationed in the general offices. The district managers, who represent the president and his cabinet in the field, are located at strategic points and exercise jurisdiction over their districts in harmony with the president's policies and instructions, although perhaps a thousand miles distant from the president's desk.

The president is kept informed by the department managers regarding the general affairs of their respective departments. Specific features of the business requiring the consideration of the president and executive board are submitted to the committee by the department managers, who in turn receive specific instructions from their respective "cabinet officers" at the close of the committee meeting. Thus, in an hour, a world-wide business is examined and given new impetus. If any other method were followed it would be impossible in so short a time even to ascertain the progress of the business.

No detailed reports are made direct to the president. All branch reports ultimately reach the department concerned, first passing through the hands of the auditor. The receipt of each statement is immediately recorded in a statement record book kept by the auditing department. This record gives the name of the branch, the name of the report and date, and evidences in a simple manner the fact that certain statements have been received, and also provides a concise record as to the promptness of the various branches in submitting their statistical reports. These reports are tabulated in various summary records by the auditing departments, and these records only are placed before the president. He sel-

dom sees the report itself unless some unusual matter brings it to his personal attention.

Copies of all reports submitted by the branch houses to the general office are mailed simultaneously to the respective district managers. This serves as a double check on the business done by the branch houses and keeps the district manager fully informed regarding all the interests of his district. The district manager himself makes his weekly report to the general offices, independent of the local manager. The department manager is in a position to judge how efficient and successful the services of the branch manager are, and can suggest any change or improvement affecting a branch house without having to consult with its manager.

Every feature of the business is covered in the weekly reports of the different departments, and reports are fully itemized.

A summary of the various branch house reports is submitted to the president weekly.

On his desk, the president continually keeps a statement showing in detail the profits of the various branches for the preceding month, the net results to date from the beginning of the fiscal year, and the same figures for the previous year. In this way, the chief has a profit-and-loss history of the business always before him.

DIVISION *of responsibility and the common interchange of ideas about mistakes and valuable experiences prevents any employee from going far wrong.*

Thus the president receives information which enables him to direct the complex affairs of the corporation. Its course is from the local representative to the district manager; then to the department manager; next, to the executive committee; then to the president. With this

system of supervision, the beneficent effects of a local manager's personality on the business under his charge are retained, and any shortcomings or delinquencies on his part are promptly ascertained and remedied.

So it is with the operation of the districts and departments. No one employee can go very far wrong. Responsibilities are borne jointly. Technical information is not a matter of individual, but of general knowledge. The experience of one is the experience of all. The lessons learned at one branch are immediately available in the operation of all the other interests of the corporation.

The president directs the operation of the business by the channels through which he receives his information, but his instructions touch practices of general importance. The department managers at all times are fully informed regarding the president's policies and desires, and it is only in the larger affairs of the company that the president finds it necessary to issue specific instructions. When occasion requires, the department manager communicates direct with the president, usually by letter, and his communication is returned to him either with a reply noted thereon, or an invitation to see the president personally regarding the matter. This request is in the form of a sticker bearing a number, a duplicate of which is retained by the president's secretary until the matter is adjusted. The same system is applied to all communications from department, district or local managers which the president wishes to refer to any of his assistants in the general office.

The ramifications of this business are such that it is impossible for the president personally to visit and direct the outside forces. He has little time for inspecting

his branch houses. He can rarely concern himself with details of any sort. He can only direct through the agency nearest to him, and that agency, whether cabinet officer or department manager, takes over the responsibility and, in turn, sends the instructions where they belong.

Just as a costly machine is reserved for its most profitable work, so such a plan as this in any business enables those executives and department heads who can deliver expert judgments, to avoid details and make their influence count in the larger questions on which business success or failure depends. The wise executive is he who grasps these principles of true management and delegates to subordinates whatever forms of detail service can be bought.

IF a young man does not find romance in his business, it is not the fault of the business, but the fault of the young man. Consider the wonders, the mysteries, connected with the recent developments in that most spiritual of all agents—electricity, with its unknown, and, perhaps, even unguessed powers. He must indeed be a dull and prosaic young man who, being connected with electricity in any of its forms, is not lifted from humdrum business to the region of the mysterious. Business is not all dollars. These are but the shell—the kernel lies within, and is to be enjoyed later, as the higher faculties of the business man, so constantly called into play, develop and mature.

—Andrew Carnegie
Founder, Carnegie Steel Company

DIRECTOR OF INDUSTRIES

IV

MACHINES INSTEAD OF CLERKS

By Kendall Banning

A CERTAIN manufacturer decided to do something radical to reduce the excessive cost of paying his men. He called in the head timekeeper.

"Watkins," he said, "something has got to be done to reduce the cost of operating your department—you must tone up the general efficiency of your assistants; it can't be done, you say?—well, this is a problem which you are paid to handle; do what you think is necessary, but reduce your department expenses."

After investigating the different machines on the market, the head timekeeper purchased an addressing machine which would operate at the rate of fifty per minute and a computing machine with which it was possible to add, subtract or multiply with a speed and degree of accuracy altogether beyond the most efficient clerk.

Equipped with these devices, he set about reducing the cost of operating his department.

The most laborious task had been that of six clerks who did nothing but write the names on time cards, time tickets, pay envelopes and on the pay roll for four entire days in each week. Altogether there were 18,000 names to write each week. The addressing machine turned out this work in a day and was operated by an office boy

earning only $1.50. This was a considerable saving over the wages of six clerks for four days, amounting to $48.00. Nor was the saving of labor the only good thing about the new method of handling the work. The names were far more legible than when they were hand written, and the chance of making mistakes was reduced.

Next to copying names, the most laborious task had been that of computing wages. It required two full days for the six clerks to total up the number of hours put in by each man and then to multiply this by his hourly rate. Not only was the time expended on this work too great, but owing to the necessity of getting the work finished in time to pay the men, all of the clerks worked at high speed and consequently made many mistakes. The labor entailed in figuring the piece work was equally trying.

Today all of this work is done by two girls with the aid of an adding and computing machine. Here again is a large saving—the services of two girls cost $8.00 for two days, where the services of the six men cost $24.00.

INSTALLATION *of up-to-date time and labor-saving machines results in the quick and correct performance of work formerly handled by clerks.*

Only the office manager who has had an experience of this sort appreciates how essential it is to keep in touch with the development of time-saving, labor-saving and business-building devices. Most employers are so accustomed to having work done the old way that they fail to see just where new methods in the office means advantage to them.

It is not yet too late to refer to the telephone as a modern machine. Only some thirty years ago there were but slightly over a thousand of these "new fangled de-

vices" in operation in the entire city of New York and only one central office. To-day there are hundreds of thousands in use, averaging around a million calls a day.

With the telephone have come its many adaptations to the peculiar needs of every business; chief among them are the telephone "extension" wires that permit any number of receiving instruments in as many private offices to be connected with a main or "trunk" wire. This service requires a switchboard and usually a telephone girl. Some of the larger offices operate large switchboards that have a dozen or more trunk wires and innumerable extensions to the various departments. By this means, too, one department may be connected with another through the medium of the switchboard without using the trunk at all. To save time and delays, private inter-department telephone systems connect one office direct with another, thus eliminating the switchboard entirely.

A new office mechanism is a new business opportunity, and the successes scored by some dealers in doing business by telephone suggest that most men are slow to take advantage of such opportunities. The typewriter is another illustration of an appliance which has made over the world of longhand writing, yet is rarely used to best advantage.

TYPEWRITERS *and the host of machines that followed have done away with the old fashioned and often illegible method of longhand correspondence.*

The significance of this invention lies not only in the speed, accuracy and legibility of the business communication, but also in the long series of attachments for calculating, perforating and duplicating, and of appli-

ances for reproducing and filing typewritten work. Before the invention of this machine, the number of words written in the approved commercial style by a good penman was scarcely more than twenty-five a minute. The record number of words produced with accuracy on a modern machine is over one hundred a minute. Carbon paper makes it possible to imprint up to a dozen copies of the original writing at once. Filing systems for correspondence have resulted that before were confined to clumsy letter-press books in which copies of communications were necessarily arranged chronologically.

A new principle of the typewriter has simplified the former laborious billing process. By using a good quality of carbon paper, a label or order can be made out with as many as twenty carbon copies for records in the various departments. Seven or eight copies are usually enough, however. Special attachments automatically care for proper spacing and columnar work.

Following the introduction of the typewriter came a host of machines for imitating typewritten work, followed by machines for signing them with fac-simile signatures, folding them, addressing envelopes, sealing, stamping, counting, cancelling and tying them in bundles. With these appliances the modern form of circular letter was made possible in quantities never dreamed of in the old days. The turn of a crank or electric switch sets going a series of machines that grind out letters signed, stamped and sealed, sorted into geographical piles, and tied up in numbered bundles ready to be dumped into the proper mail bags.

Machines for reproducing typewritten letters range from a simple duplicating machine costing a small sum, to mechanisms capable of turning out between three and eight thousand letters an hour.

These machines are of different types; one type reproduces a letter by the gelatine transfer process; another by the stencil duplicating process; and a third is based on the principle of the printing press with the addition of an ink ribbon between type and paper to give the reproduction the appearance of actual typewriter work.

This one notion alone has effected radical changes in methods of business by opening up heretofore impossible channels of trade so far away or numerous as to supplant salesmen's calls.

Such correspondence, recognized as "form letters," loses much of the influence that personal communications demand. One ear-mark of a machine-made letter was formerly the lack of the approved name and address of the addressee above the salutation. Now the types selected for use on multi-copying machines are designed to conform exactly with the letters on the various makes of typewriters, so that a "filling in" of a personal heading on a machine-made letter may not be differentiated from the body of the letter—if the typewriter ribbon matches the color of the ink which is used on the manifolding machine, and if the spacing is adjusted the same on both machines—thus giving each letter the semblance of a personally dictated communication written especially to the addressee. An experienced typist may "fill in" between 800 and 1,200 letters a day. Devices are now being attached to typewriters that give the "filled in" salutation perfect alignment with the body of the form letter. An autograph signature in zinc etching can be printed on the letter in black or purple ink.

Folding letter sheets so that they fit into their envelopes does not require skilled labor, but it does require a facility that runs up the expense of circularizing if

the job is done by hand. Assuming that 50,000 letters are to be sent out, an expert worker might be able to fold 6,000 a day, or ten workers might do the job in a day of eight hours. Where quick mailing is a factor, as in a mail sales campaign, hand labor is a serious handicap.

This volume of work may now be done in a day by an inexperienced clerk or office boy by merely feeding the sheets into the trough of a folding machine, operated by a motor. There are two styles of folding machines, one working on the same principle as the folding devices on a newspaper press, the other a small device of rubber rollers. Considering the labor cost, the economy of office machinery over hand work is a factor to be reckoned with when work in large quantities is to be done.

A device which eliminates the expense of addressing envelopes is the open-front envelope. That section of the envelope which usually holds the address is made transparent; the letter or invoice inclosed is then so folded and placed that the superscription is visible through the transparency and becomes the address.

The next step in the making of a letter is the sealing of the envelope. The good old-fashioned scheme of licking the flap of the envelope with the tongue prevails now only in isolated cases. The moistened sponge projecting from a glass receptacle and numerous small hand-sealers are adapted to a small volume of routine mail. When the daily correspondence runs up into four or five figures, the envelopes can be sealed on an appliance that works more quickly and accurately than a whole department of workers. The envelopes are merely fed into a chute. The turn of a crank starts the machinery that moistens the flaps, closes them, stacks them under pres-

sure on a drying rack and counts them—as a check upon postage disbursements—at the rate of 6,000 an hour or more, depending upon the style of machine.

A newer machine will now seal, count and stamp envelopes with one operation. A boy can feed in the envelopes and the machine will turn out the work at the rate of 5,000 an hour.

The stamping of envelopes can be done at the rate of 5,000 an hour by a machine that can be operated by any boy or girl. The envelopes are supplied to the machine and the stamps are fed in long rolls. Such machines also register the stamps used, so that the count may be checked against the stamps issued and against the envelopes that are counted on the sealing machine. As a further check against loss, many large concerns now perforate their stamps for purposes of identification. The machine for thus marking them—the perforation is usually in the form of the initials of the firm—is simple and inexpensive, and acts upon several hundred stamps at each operation. Some firms, also, by arrangement with the postal authorities, cancel their own stamps by a similar process—a system that guards against theft and facilitates the work of postal clerks, thereby avoiding mailing delays.

COMPUTING machines, the talking machine and a dozen other ingenious inventions have resulted in far-reaching economies in the operation of modern offices.

These facts are impressive because they reflect the spirit of modern business life—a life that is conspicuously alert to do more and better work, at less cost of time, money and effort. It was only a few years ago that much of the factory work now being done by machinery was done by hand, and the world marveled at

the almost human adroitness of Yankee mechanisms. The same ingenuity has been applied to the invention of office machinery. The office output has increased proportionately.

Computing machines have gone so far beyond elementary stages that mental calculation is practically done away with in many large business offices. In addition to pay roll calculation, such appliances in standard and special makes are used for handling numbers and fractions, making inventories, estimating and computing interest and discounts, figuring time, distance, scores, yardage and other units. Card punching and sorting machines have made classifications and statistics of the most intricate kinds a matter of hours instead of weeks and have thus contributed to the exactness of business building as a science.

The talking machine, beginning as a mere ingenious toy, has developed into another office machine of thoroughly practical value that is materially cutting down the cost of handling executive work by simplifying the dictation of correspondence. These machines are modifications of the wax-cylinder phonograph and are operated by talking into the mouthpiece and thus making records. By the use of various attachments, the dictator may start and stop the machine at will, increase or decrease the speed, repeat, make corrections, and do practically all the work that is ordinarily expected of a stenographer. The cylinder records, when completed, are transferred to the machine of the typist, who, placing the receiving tubes to her ears, transcribes the recorded words, adjusting the speed nicely to suit her convenience. When a wax cylinder is once used it is shaved and re-used—a process that may be repeated many times before the wax must be replenished.

This system has proved a great economy; and it is of special value in offices where the demand for stenographic service concentrates on short periods and abates between whiles, thus overworking the stenographers at special hours, with intervals of wasted time.

There are machines for wrapping and tying bundles, that will wrap and tie packages of a uniform size at a high rate of speed. Other devices number sheets, changing their figures automatically at each impression or repeating, as may be desired.

There are machines into which miscellaneous coins may be dumped and from which they are issued, by the turn of a crank, neatly sorted according to denominations, counted and wrapped in bundles. This money-sorter consists of a shallow metal tray, circular in shape, in which the coins are placed. By revolving this tray the coins are thrown to the outer edge by centrifugal force, when they drop into the proper grooves and roll into cylinders which indicate the number of coins.

A companion machine is a device which dispenses with the labor of making change by dropping the proper coins in response to pressure on the figures of its keyboard.

Time recorders check the exact minute of arrival and departure of office employees—machines that operate with a clock attachment and which, in response to the worker's punch, print on tabular sheets of paper his promptness and delinquencies. Arrivals later than the time scheduled, or departures earlier than the hour established, may be printed in colors that flash their message to the boss from among their less conspicuous fellows. Another time recording machine is a compass-like device which cuts out hours of clerical work by computing the actual working time of employees. The use of time

records has improved discipline in offices and shops so perceptibly as to increase workers' efficiency several per cent.

Retail store fittings that are being used in offices are the overhead cash and package carrier and the pneumatic tube. A large editorial office in New York is equipped with such service between desks and departments which are located on different floors. It has found the service to be quicker and safer and considerably less expensive than a corps of office boys.

Besides the labor saving and protective office machines here mentioned, there are, of course, many others. For instance, the check protector, which perforates checks and prevents fraud; and the rubber date stamps, which record time and set themselves for each succeeding day; watchmen's records, which graphically show each time the door is opened; the machine which figures pay rolls by the hour, day or month, and in fractions and in whole numbers.

SUBSTITUTION *of machines for hand-labor economizes not only in clerk-hire, but also in the amount of floor space used and the number of errors made.*

But after all these mechanical devices have been described, the most vital office equipment of all has not been mentioned—the one sheet or unit system of record-keeping. The card index and loose-leaf, by facilitating and dispensing with clerical work, were really the pioneers in the field of office efficiency. As their application was extended to meet every phase of business, mechanical devices kept pace. Now, with the vertical filing cases, card records, and loose-leaf systems of accounting, the modern office has hardly a trace of resemblance to the office of a generation ago.

As an illustration of the savings the ordinary office may effect by substituting machine work for hand labor, the manager of a firm in the middle west recently approximated the weekly cost of doing the office work now as compared with the costs if the work were done without mechanical aid. Here is his approximation:

	Weekly Saving
Addressing letters	$ 34.00
Folding letters	51.00
Billing machines	25.00
Sealing machines	17.00
Imitation letters	208.00
Adding machines	20.00
Indicators	15.00
Time clocks	12.00
Typewriter attachments	16.00
Total	$398.00

The office whose work is done by the pressure of electric buttons and the turning of levers is no longer a fiction. Your office management is not fully effective except you recognize as business opportunities the labor-saving and trade-getting appliances your work calls for and keep in touch with progress in those machines best suited to the size and range of your business.

MANY a profit dribbles into the waste basket through the myriad discardings of petty supplies. Nowhere are pennies more unconsciously wasted than in the average business office, and nowhere, once the habit has been formed, can they be more easily saved.

—John M. Eaton

V

THE BUSINESS MAN'S DESK

By Edward Mott Woolley

OUR modern philosophy of desks has become almost as concrete as the philosophy under which a lathe or dove-tailing machine is operated. This philosophy looks upon the desk, not as a piece of furniture, but as a working appliance. It is the pivot upon which swings all the executive detail. If something is wrong with one of its cogs or pinions the work of the executive is thrown out of adjustment. If the delayed orders, the lost sales, the misunderstanding of instructions, or the general incompetence of the office force are traced back, they are more than likely to lead to the desk methods of the executive himself.

We all know the old-fashioned roll-top desk—the "high roll," with its maze of pigeon-holes and curious compartments under the sliding lid. We still see it in common use, though in offices that have studied the subject it is disappearing. In its place has come either the "low roll" or the flat-top desk. The former has very few pigeon-holes and the latter none at all, though both are equipped in another way.

When the old-fashioned roll-top desk came into use there was a reason for all these pigeon-holes and compartments. That reason lay in the absence of other known facilities for taking care of desk detail. Here, in

front of the executive, lay his only available working file. When he had read his morning's letters he chucked them into one of the compartments until he could answer them—nor was he particular in his selection of compartments. Sometimes pending correspondence became mixed with estimates, bills, reports or other documentary matter and was forgotten for days or weeks. The same thing happened to estimates, bills and reports. And down below, in the drawers, accumulated a wonderful mixture of catalogs, customers' lists, cost and expense reports, complaints and cigars. Similar conditions prevail today in many offices, despite the fact that desk mechanism has made such methods obsolete. In your office and among your workers you can find no more profitable point of reorganization than in systematizing the work and arrangement of the individual desk.

The old-time desk manufacturer had no particular kind of business in view when he got up that huddled group of pigeon-holes and honey-combed openings. In his mind they represented a composite need equally available for a lawyer, doctor, manufacturer or merchant. His chief aim was to get pigeon-holes enough so that somewhere among them might be found compartments to suit special needs.

Now, the lawyer needed oblong holes for his legal documents; the doctor required compartments of a certain size for his prescription blanks; the manufacturer called for a suitable receptacle for his factory reports. Thus, when a merchant bought a desk, he bought not only equipment for himself, but for every other sort of business in the directory. Consequently, he jammed his unanswered correspondence into the place intended for the lawyer's writs, and kept doing things of this sort until his desk resembled a prize-contest puzzle. Half the ex-

ecutive's time was spent in searching for documents that might have been anywhere from the topmost crevice to the bottom drawer.

But the age of specialization dawned, and desk manufacturers began to study the problem of saving the executive's time. It was seen that the outward form of the desk was no more than a building in which to house a more or less intricate machine.

> SELECTION *of the right kind of desk and the proper arrangement of information in it prepares the way for the efficient handling of the day's work.*

The chief attention, then, was given to the machine, and not to the walls that enclosed it. But the same machine would not do for every kind of business. So, as these business wants were studied, special adaptations were made—not so much in the desk itself as in the interior layout. The desk, in other words, became a sort of filing cabinet for papers in the course of administration.

Then the desk developed still further and became not only a filing cabinet for certain classes of pending documents, but a working index for subsidiary current files. That is what the modern desk is today.

The nature and extent of the business, of course, must determine the mechanism of the desk. Some executives find it possible to make the desk itself hold all or most of their pending papers; in order to accomplish this, they avail themselves of numerous adaptations for getting just the filing facilities needed. Instead of buying drawers and compartments without any analysis, they chart their requirements and get the drawers or sections they want. If they need card-index systems chiefly, they buy the drawers designed for that purpose; if their

papers are large, like the average letter, they equip themselves with vertical filing drawers; if they have many documents of legal size, they get document sections. Or they combine these compartments in the proportion that best suits them.

But if the business is larger, or for any reason it is not desirable to turn the whole desk into a file, then the subsidiary desk file comes into play, while the desk itself is more or less simplified.

Take a typical "low roll" desk and inspect its mechanism. In the space immediately under the lid you find not more than half a dozen receptacles. One is the locked drawer for valuables; the others are for pens and pencils, letter-sheets, envelopes, check-book and bank-book.

The upper left-hand drawer, instantly available to the executive as he turns in his swivel chair, contains the card-index. The shallow center drawer is divided into little bins for clips, pen-points, rubber bands, erasers, and the like. The upper right-hand drawer holds the vertical filing system for work in process. Beneath these are storage drawers—not ordinarily used for any filing purposes whatever.

Now for a minute study the vertical filing drawer —always remembering that the papers filed in a desk or in cabinets subsidiary to a desk, are connected with unfinished business. The moment the transaction is closed these papers go to permanent files.

This vertical file is arranged on the order of modern letter files. It consists of manila folders between pressboard guides, properly fitted with tabs and compressors. It may be indexed on the tabs alphabetically, numerically, geographically, chronologically, or in any way to suit the peculiar needs of the executive. In the ordi-

nary business this file will contain such classifications as "Pending Correspondence," "Rush Dictation," "Telegraph Business," "Telephone Business," "Unfinished Matters," "Personal Papers," and so on. Into these folders go the papers that were chucked into the honeycombs of the old-time desk.

CLASSIFICATION of information and the use o the card index and vertical filing system makes the modern desk in itself a complete working machine.

Now turn to the card-index drawer again. A card-index is merely a record of information, so arranged that any given fact may be obtained in the shortest possible time. Every business has its own class of facts. These may pertain to customers' names, prospects, goods in stock or ordered, salesmen's routes, estimates, credits—a hundred subjects that are bobbing up continually. As many sets of cards may be used as desired. In some desks half the drawers are used for card-index systems.

This information may be complete on the cards, or the latter may simply show a reference to a file outside the desk. Now appears the value of the subsidiary desk file, which, although separate from the desk, is a vital part of it. The desk and the file together play the role of vanished pigeon-holes, but they do it infinitely better and on a vastly broader scope.

In these two appliances—the desk and the file that stands within reach—we have the machine that is really the heart of the business or department. The executive is the engineer who runs that machine, assisted by his clerks. Even when the desk itself is made the chief file for pending matters, the routine detail of keeping the files should be handled by a capable clerk.

In a typical machine of this sort, the desk of the man-

ager of a manufacturing house, the bottom drawers of the cabinet are devoted to catalogs, drawings and similar large and bulky papers. The other drawers contain salesmen's reports, follow-up systems, comparative statistics, advertising figures, buying records, current invoices, stock records and special information of this sort.

If the alphabetical system of indexing is followed, no separate index is required. But many executives prefer the numerical method; then the desk itself will contain the card-index system, where reference can be made to it instantly.

For example, the executive wishes to refer to his advertising statistics under the sub-title of some magazine. He turns to his desk cards and finds the one bearing the name of the periodical, in its alphabetical position on the tray. This gives the number of the folder in the cabinet. Cross-indexing of this sort may be carried out indefinitely.

Often the index-card itself can be used to present brief summaries or tabulations, or concise statements of facts, so that the mere reference to the card will suffice, without opening the cabinet.

The benefits from systematized desk procedure are seen even in the most ordinary transactions. Suppose that a customer calls up on the 'phone and asks for a verbal summary of an estimate on a prospective job. It may be that the customer has mislaid the written estimate or it has passed into the hands of some employee who has locked it up in his desk and gone out for an hour or two. Many concerns thus called on for a verbal condensation of an estimate would not be able to give it without considerable delay. But the executive with modern desk methods, still holding the wire open, turns to his card-index and then to his desk-file, gets the car-

bon of the estimate blank and gives the information on the spot.

Every executive has an endless chain of demands upon him for specific information. The president calls on the general manager over the 'phone for the costs on some piece of work; the treasurer asks for the returns from some advertisement; the superintendent is in a hurry for a schedule of ingredients; customers are asking continually for this or that. Such demands consume a large percentage of the desk time of the executive unless the desk itself is made a tool for supplying the answers quickly.

It does not make much difference what position the executive holds; his desk procedure, if inefficient, may keep him working far into the night. If efficient, he will get his work out at closing time.

Even the banker has reformed his desk operations during recent years. No longer does he keep his credit information tucked away in unclassified pigeon-holes and drawers. His desk is merely the center of a highly specialized *finding* system. The professional man is fast falling into line and is discarding the desk as a mere piece of furniture and is turning it into a machine. The physician, for instance, looks in his card-index in or upon his desk and locates his case histories and special articles to be consulted in magazines. The real estate and insurance agent—even the small store manager—has learned to put detail out of mind and to keep it at his fingers' ends in this way.

The flexibility of the supplemental desk file makes it the ideal plan for many classes of executives. The file may be of any dimensions. It may have any one of a hundred drawer and compartment arrangements and indexing systems. If the business is small, a little box

containing a hundred cards may be found sufficient. Arranged in alphabetical form, they may show lists of customers, records of stock or sales, follow-ups, names of employees or of prospects. In the same box, or separately if desired, may be kept a card-tickler system with the guides arranged by the day, week or month. All the cards in the "Monday" classification, for instance, indicate the matters to be taken up on that day.

PREPARATION *for the most efficient kind of work has very largely resulted in replacing the old-fashioned roll-top with the low-roll or flat-top desk.*

In selecting a type of desk, a large number of executives now prefer the flat-top standing clear of the floor in sanitary fashion. There is a certain caste about the "low-roll" to be sure, but the flat-top desk offers no temptation whatever for cluttered pigeon-holes. Here is absolute simplicity. The filing facilities in the drawers or the subsidiary desk cabinet makes this simplicity possible.

One executive in a big house keeps nothing on his desk or inside it except his inkstand, pen, and such documents as are under his consideration at the moment. He takes pride in pointing to the lonesome-looking top, and showing his friends the empty drawers. His secretary, at another desk, has the card-index system and is within instant reach of the desk cabinet file. A year ago this executive's desk was literally buried by papers of every description. He was a slave to the detail of his desk—which at that time was an old-fashioned high-roll. In the reformation he went from one extreme to the other. The secretary keeps an hourly tickler of important business, and sees that the executive is kept informed.

The general layout of an executive's desk is arranged,

in the modern office, along the lines described here. A definite equipment is assigned to each desk—pens, pencils, pins, clips, rubber bands, forms. Twice a week a boy replenishes the receptacles at a specified hour. He checks the items from a list that is furnished him; nothing is allowed to go on or in the desk that is not designated in the layout.

The metal telephone bracket has been found a time-saver by numerous executives who had been annoyed and delayed by the loose cord that habitually became entangled in the papers on the desk. The telegraph call, the desk clock, the little bracket for holding the list of appointments, the roll-paper bracket attached to the 'phone for memoranda, the quick-drying ink pad for rubber stamps, the use of different paper clips for different purposes—these and similar appliances are available to the executive and contribute materially to the speeding up of his desk work in much the same way as the appliances on factory machinery enable the mechanic to produce better work in less time. The desk of the modern business man is no longer a piece of furniture at which to sit; it is an instrument by means of which he is enabled to increase his day's work.

SYSTEM means to a business what good tools mean to a craftsman. A merchant can do good work no more than a craftsman does good work unless he has the mechanical means. And the mechanical means of the business man is system.

—Phillip A. Conne

Secretary and Treasurer, Sales & Company

PART II—LAYING OUT AN ACCOUNTING SYSTEM

Invention in Methods

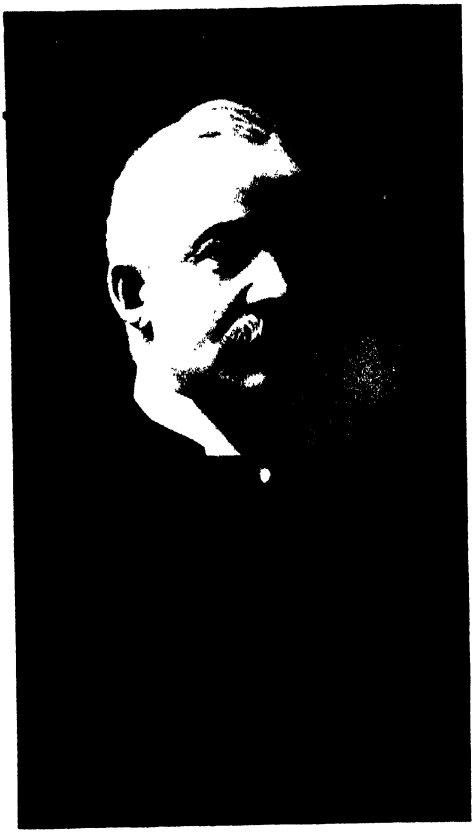
ANDREW Carnegie said: "Take away all our factories, our trade, our avenues of transportation, our money, but leave me our organization and in four years I shall have re-established myself."

The processes of modern business are like the functions of a complicated machine, and the executive must organize every part of his establishment as carefully as an inventor. Organization means running the machine with all its parts in harmony.

The management of a large corporation is organized thought, exactly as a machine is the organized thought of an inventor.

The executive must be a specialist along the lines which make for efficiency in administration. He must have that God-given quality, *capacity for invention in organization.* There is just as real invention in the field of organization and administration as in the field of mechanics. Efficient organization is an asset which counts for commercial and industrial success more now than before.

James Logan



JAMES B. LOGAN

Chairman, Executive Board, United States Envelope Company

DIRECTOR Bureau

VI

MAKING THE ACCOUNTING ROOM CONVENIENT

By Wesley A. Stanger
Sales Manager, Royal Typewriter Company, Chicago Branch

WHERE a business is small the accounting work may not be sufficient to require a separate room. In a small store the entire work may be done by part-time work at a single desk. The larger store will require three or four bookkeepers, while the largest city department stores frequently have an entire floor section devoted solely to the accounting department. In every case, however, there are certain principles in the location and arrangement of the accounting room which make for convenience, economy and practical value.

In the first place, the accounting room should be separate from the rest of the office, so as to prevent intrusion from the outside that will interfere with the work of the accountants and clerks. This further secures privacy in connection with certain records that should be confidential and known only to one or two men in control within the department itself.

In the second place, the room should be accessible for customers and executives. The cashier's window must be near the entrance of the office in order to give outsiders easy access to it, while the department as a whole should be placed conveniently for the executives directly interested, and also for the credit, collections and other sections closely connected with the accounting work.

In a factory, raw material enters at the receiving door and progresses in logical order from department to department until it comes out as finished product. The same principle applies with equal weight in the office. The loss of time incurred in taking papers from one end of a large room to another and then bringing them back to the starting point is an important thing to be considered. But even more important is the possibility that papers will be lost in the transfer.

Another simple but significant thing to remember is that all accounting work should be centralized for the same time, space and labor saving reason which compels the grouping together of all correlated work; it facilitates intercourse between employees; no time is lost in going from one record to another; and continuous progress results. Further, centralization tends to eliminate unoccupied space—an important feature in the arrangement of every office.

PRINCIPLES *of arrangement applied to the accounting room secure privacy or accessibility, centralization of work or continuity of operations as desired.*

The application of these four principles, of course, must be in accordance with factors that vary in different offices—the size and shape of your main office, the volume and kind of business, and the relative importance of your various records. One company, for example, needs much space for the records of the cost department, while another business takes up a large amount of room with the detailed record of thousands of customers' accounts. While, therefore, arbitrary plans can not be given, the four fundamental principles may be followed to good effect.

Figure VI shows an accounting office of medium size

which embodies these four fundamental principles very well. As the visitor enters from the street, he finds the cashier's cage directly on his right. Through the window of the cage the cashier receives all mail and remittances brought by individuals in person. Mail is opened in the cashier's office, whence cash orders pass for entry to the bookkeepers in the rear, while the cash itself is deposited in the safe. Other orders pass to the order department, which is opposite the bookkeepers and to the left of the main entrance. Just back of the bookkeeping department is the auditor, who also acts as the credit man.

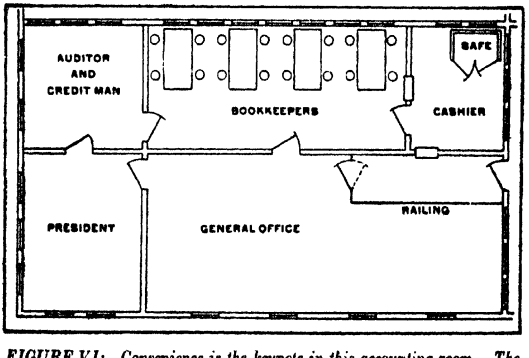


FIGURE VI: Convenience is the keynote in this accounting room. The bookkeepers are removed from both the general offices and the public, and are thus free from interruption

Though quite compact, this arrangement is ideal for the accounting office where work is not complex. In this instance, the president's office adjoins the office of the auditor. In larger establishments it is not necessary for the offices of the executives to be close to the accounting department.

In one office of pretentious proportions the president is at the extreme end of the office from the accounting room (Figure VII). All executive offices are arranged on a hall that leads to the general office, and the president's office is at the far corner. Between his office and

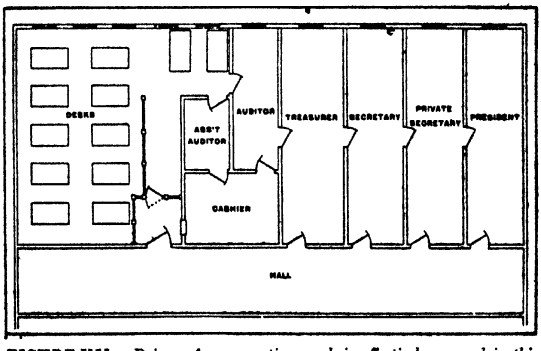


FIGURE VII: Privacy for accounting work is effectively secured in this office. Entering from the main hall, the visitor sees the busy accounting room, but does not come into direct contact with it

that of the secretary is that of the private secretary, who serves both officials. Next to the secretary comes the treasurer, and then the auditor, who is nearest the entrance to the main office.

When a visitor enters the long hall the first door he reaches is that leading into the general office. The cashier occupies the cage at his immediate right. Her window is placed near the door for the convenience of collectors, express drivers and others. Doors are so arranged that she can walk from her cage into the executives' rooms without going into the general office or out into the hall. The assistant auditor's desk occupies the space next beyond the cashier, where he has immediate

access to both the cashier and the auditor, and can overlook the entire office force. On his right are the cost and filing departments. In front of him are double rows of desks for clerks and general bookkeepers. All of these desks face the main entrance. Visitors entering the office see the busy accounting department—but no more.

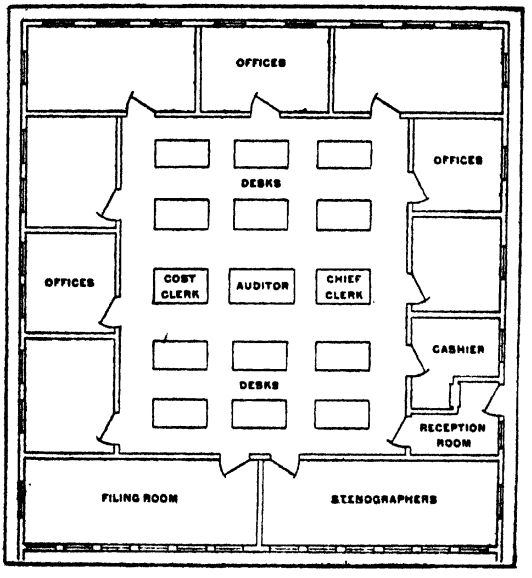


FIGURE VIII: In this accounting room, the bookkeepers are surrounded by offices and thoroughly cut off from outside intrusion, although free access is had to them from each of the private offices

In this big office orders pass continuously in one direction from the mail-opening department to all departments interested. The traffic, purchasing and sales de-

partments are conveniently near together, and in the farthest corner is the filing department, to which, in the usual course of handling, papers naturally find their way.

Another office (Figure VIII), rectangular in shape, has all private offices along the sides and at one end, each with a door leading into a central accounting department. The auditor is in the very center of this room, on a platform raised six inches above the floor. On the right is seated the chief clerk, on the left the cost clerk. The other desks are arranged in rows on either side of the auditor. This is ideal centralization;

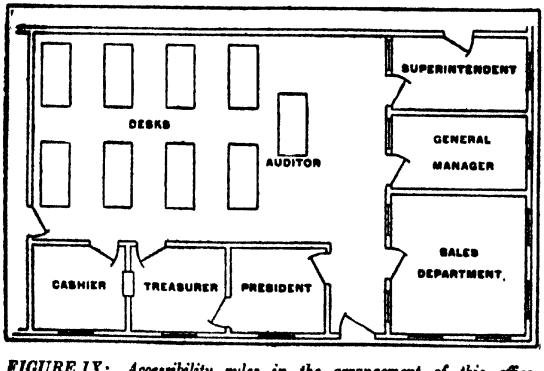


FIGURE IX: Accessibility rules in the arrangement of this office. Coming in from the street, the caller immediately faces the busy accounting force, with the auditor in front of them and near the entrance

it facilitates progressive work, but it gives freedom from intrusion in only a moderate degree.

A visitor coming into the office illustrated in Figure IX finds the sales department on his right, and the president's office on his left. An aisle extends to the far end

of the room, from which doors on the right lead into the private offices of the general manager and the superintendent. Another aisle, just beyond the president's office, has doors on the left leading into the offices of the

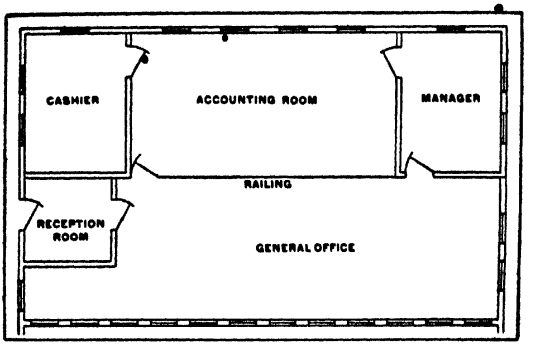


FIGURE X: The manager is the central figure of this arrangement. From his office he can step either into the accounting room or the general office, and thus the work focuses toward his desk

treasurer and the cashier. The rest of the oblong room is taken up with the accounting department.

Within this department sections are arranged with a particular view to accessibility. Immediately in front of the manager's door is located the desk of the auditor, and the clerks in the auditing department face him like pupils in a school room. In front of the auditor and to the left is the freight accounting department, and to the right the purchasing. Behind the purchase books are the general ledgers, and back of them the cost system. Immediately behind the freight department is the sales department, and back of that the "material" department. This office as a whole forms a corner of the fac-

tory building. There are private entrances into the factory from both the superintendent's office and the "material" section.

EXAMPLES *of layout which illustrate the best principles of arrangement in the accounting room, anp secure the highest degree of efficiency in work.*

The accounting department is within sight of everybody, and each man is placed nearest the section that he most frequently comes in contact with, irrespective of the progress of work within the accounting department as a whole. This is an exceptionally good example of accessibility from without, but the arrangement of the department itself does not favor continuous progress in

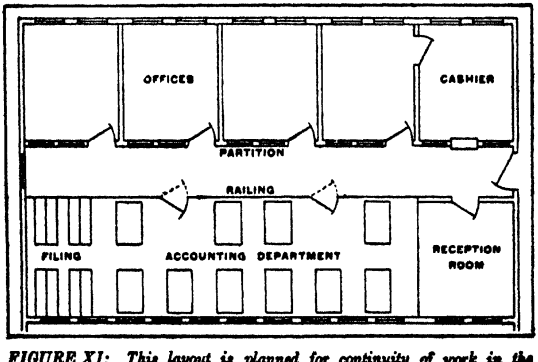


FIGURE XI: This layout is planned for continuity of work in the accounting department. From the cashier's office all documents take a zig-zag course to the rear of the office where the filing department is located

one general direction. Mail is opened in the rear and orders are taken to the front for entry on the books. They are then returned to the order department on the other side of the room.

It is not unusual to find the accounting room focusing round one man. Such a department in one office (Figure X) faces the manager in the farthest corner. Two doors lead from his private room, one directly into the accounting department, and the other into the general office.

The cashier is located at the entrance, and the manager can step from one door into the accounting department and from there into the cashier's cage. From his other door he can step into the general office. Every part of this general office leads either into the chief's private room or into the accounting department. The files and stenographers are in a separate space.

Probably one of the simplest illustrations of a progressive plan of arrangement is an office which is divided by a long aisle (Figure XI). The cashier occupies the first space on the right of the entrance, and opposite is the reception room. Back of the cashier come various private offices, and on the other side of the passageway is the accounting department. All papers lead from the executive interested to the department head interested and from him directly to the accounting department.

FLOOR space is one of the most important items of non-productive cost in any business, and it is therefore of vital importance to prevent its waste.

—A. T. Morton

VII

THE BOOKS AND THEIR ACCOUNTS

By Neil M. Clark

WHY do you keep books?

A printing office proprietor faced this question when his bookkeeper quit without notice, leaving the accounts in a tangle. Straight thinking had won for the printer in his business. He now determined to think out accounting to the point where he could check up the work in that department as expertly as he could in the press room and bindery. He glanced into the largest of his three mysterious books. Here a page assembled his dealings with a paper house; farther on with a customer; again with the type foundry. Evidently, the bookkeeper had sorted dollars and cents upon these pages, just as compositors distributed "a's" into one compartment in the type case and "r's" into the adjacent one. There were "boxes"—that is, pages—for every important group of receipts or disbursements. This book was his *ledger*.

The other two books did not sort amounts, but merely lined them up, one after another, as the transactions crowded in during the day, too fast to be sorted. One book recorded transactions involving cash, the other described all the remaining miscellaneous items. An index column on each ledger page referred to the pages of these books on which the same transactions appeared;

and it was evident that these books carried the original entries, being feeders for the pages of the ledger. These volumes were his *cash book and journal.*

Puzzling out these simple facts, it seemed to the printer that his two books were merely records of the day's business; and that the third book—the ledger—sorted everything, cleared away small details and brought the business to a sharp focus which showed his gain or loss.

The customer or the court might at any time inquire into his business transactions and ask: When? How? Why? With whom? How much? His cash book and journal, the printer saw, would give answer. They would supply detailed evidence of his dealings, witness his claims and warn him of bills falling due. First, however, he would find it convenient to consult the proper ledger page as an index to all these day by day items.

> RECORDING *transactions in the day's business and focusing them periodically into balances which show net results is the service rendered by books.*

This book where balances were struck, moreover, could answer the broad questions of his business; the customer's, "How does our account stand?" the banker's, "How have your expenses run for the last three years?" and the press credit man's, "Is my O. K. on your three thousand dollar order warranted by your monthly business average?" These answers would have meant making up a special statement based upon a search through many record pages, had not his ledger pages freed every transaction of detail and focused all into such needed totals.

The printer saw that it would be of advantage to have

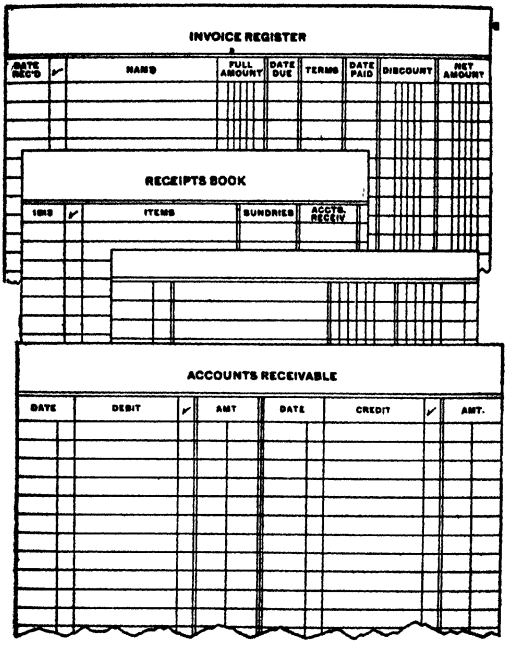
his accounts so divided that he could see his sales, his purchases, his business with the bank, his costs, his expenses and his profits separately. He saw that his bookkeeping plan might be better adapted to these ends and, calling in an accountant, he worked over a standard printshop system of accounting to suit his particular desires. He now uses vouchers and a duplicate check system, a cash book, a sales journal, several small ledgers for special accounts and a final general ledger.

"These half dozen volumes are no mystery to me," he declares. "One group of them is my catch all, where I bring together all the buying and selling transactions of the day. The other pile—my ledgers—are type cases, where into one box I toss my printing account with the real estate man, into another my bills from the paper house around the corner. On opposite halves of the page I record what value in cash, in bills or in goods is put in and what is taken out. At the end of the month I add and balance, getting my totals and finally ridding myself of all details, except when I want to turn back to the first pile of books for some special item.

"I know now that any system of bookkeeping merely records and balances. By finding the reasons back of his books and fitting them to his business, any one can take advantage of new accounting ways. Your nail boxes, your cracker boxes, drug containers, jewel or candy trays, are as apt comparisons as my type cases; and the right bookkeeping system is just that simple and sensible. The only rule I have pasted up, besides my type case comparison, is "credit on the right side what goes out, debit at the left what comes in."

Accounting is simply a method which hard headed business men have worked out for recording and balancing what comes in and what goes out in the transaction

of their business. When our business ancestors found themselves thumbing through their trade diaries dozens of times a day in search of various dealings, they de-



FORM I (next bottom): This is the simplest form of journal. FORM II (next top): Receipts side of the cash book. FORM III (bottom): A simple ledger sheet. FORM IV (top): The invoice register

veloped a further bookkeeping process to do away with this inconvenience. This plan was to sort items into a

final book which gave balances, noting in another volume that they were classifying each purchase or sale under such and such headings.

A separate book was then found convenient for first noting of cash items only. These are the three elementary books of account: the journal, which records (Form I); the cash book, carrying the original entries of transactions involving cash (Form II); and the ledger, in which accounts are sorted and balanced (Form III).

Soon the journal was improved by putting all like items in a column by themselves so that you could run your finger down the page and at one time transfer everything which belonged on one ledger page. One of these columns now and then filled so quickly that it seemed more convenient to give a separate book to such items. If transactions of one kind were happening simultaneously at a dozen counters, special blanks were designed to record them, so that the records could be assembled, sorted and more conveniently posted to the ledger.

It also became more convenient to split the "balance" volume into several books, which today are called "special ledgers"—accounts receivable, sales, expenses and the like.

> ACCOUNTING *takes into consideration every tangible and intangible feature of the business—methods of determining what accounts to debit and credit.*

Accounts arrange payments and receipts so that you may have a record and avoid overlooking what is due to you or from you. The cash payment and the shipment you make are both credited, the one to cash and the other to merchandise accounts. They are also both debited, the

money against the debt satisfied and the goods against the person who is to pay you. The debit for the merchandise will then warn you from time to time that its money value is owing to you. Its warning will not cease until you receive the money for the goods and by a credit turn it into a mere record.

All accounts are either warning you of money due and owing or keeping a valuable record of your dealings.

WHERE TO ENTER	A CREDIT PURCHASE	OUTGOING CASH		A CREDIT SALE	INCOMING CASH	
		REMITTANCE ON ACCOUNT	CASH PURCHASE		PAYMENT ON ACCOUNT	CASH SALE
JOURNAL OR RECORD GROUP OF BOOKS				(A) BILL OR REGISTER OF SALE		(A) BILL OR REGISTER OF SALE
		(A) CASH BOOK	(A) CASH BOOK		(A) CASH BOOK	(B) CASH BOOK
	(A) INVOICE REGISTER					
	(B) JOURNAL	(B) JOURNAL	(B) JOURNAL	(B) JOURNAL	(B) JOURNAL	(C) JOURNAL
LEDGER OR BALANCE GROUP OF BOOKS	(C) INDIVIDUAL LEDGER ACCOUNT	(C) INDIVIDUAL LEDGER ACCOUNT		(C) CUSTOMERS' LEDGER	(C) CUSTOMERS' LEDGER	
				(D) ACCOUNTS RECEIVABLE	(D) ACCOUNTS RECEIVABLE	
	(D) ACCOUNTS PAYABLE	(D) ACCOUNTS PAYABLE				
		(E) LEDGER CASH ACCOUNT	(C) LEDGER CASH ACCOUNT		(E) LEDGER CASH ACCOUNT	(D) LEDGER CASH ACCOUNT
	(E) MERCHANDISE		(D) MERCHANDISE	(E) MERCHANDISE		(E) MERCHANDISE

FIGURE XII: The books or specific accounts in which to enter every day transactions are here shown. In receiving and paying out money, whether the transaction is for cash or credit, your first entry is at "A," under the proper heading at the top of the chart, then at "B," etc. When distributing entries are made on other books, the journal is not used. Service and wages have special accounts, handled like merchandise, which they replace if you sell only service

To do this, they must handle not only tangible money, but also merchandise, services, real estate, shares and other things that stand for money. When accounts deal with representations of cash, they assign to them a money value, and debit or credit these values exactly as if they

were currency. You debit a cash payment on account to cash and credit it to whoever paid you; you debit the value of goods received on account to merchandise and credit it to whoever you must pay for it. Although the two debits represent entirely different things—paper currency and cloth goods—they are entered on the books according to a single standard, their value in money. The master book or controlling volume—the "general ledger"—takes these balances and boils them down into the concise totals which the manager of the business can use at once in his production and sales planning.

All of these books and transactions, therefore, are merely steps in this recording and balancing process. Under these two groups, books of record and books of balance, everything in accounting naturally falls.

Any transaction of the four classes (Figure XII.) which make up accounting, (1) cash purchases, (2) credit purchases, (3) cash sales, (4) credit sales, must have an original record and must finally filter in essence into the general ledger. You may note an intricate transaction in several intermediary books, but these go-betweens are merely screens through which items pass for finer sorting.

The ledger "account" is merely an arrangement of two sets of like figures—items which come in and like items which go out—so that, knowing what you had at the beginning, you can by simple calculation, see just what transfers have been made, what is due or owed, and what is now on hand. The printer's plan of deciding what belongs in the left hand or debit column, what in the right or credit column, was "debit what comes in, credit what goes out." This means that the left-hand column must show exactly what part of your business has been assigned to that heading and the right-hand

column what definite value that heading is giving up or is no longer responsible for.

One ledger page may be headed "cash," another "merchandise," and a third, "accounts receivable." When you sell a bill of goods on credit, you credit merchandise, which surrenders that amount of stock, and debit accounts receivable, which becomes responsible. When the buyer pays you, you debit cash, which becomes responsible, and by a credit free accounts receivable from its responsibility. By recalling the printer's plan of debiting the type box when he puts anything in and crediting it when he takes anything out, you can at once charge and credit correctly.

FOCUSING *transactions into balances is the function of the various ledgers—a group into which all books except those of purely original entry fall.*

When you fill out a voucher with a cash payment, or write a check and fill in the stub, or enter a sale on its proper slip or ring up the cash register, you are making an original entry, such as business men generations ago made in their diaries. At night you assemble, sort and foot sales slips, add cash vouchers, read the register, carrying your totals to the various ledger columns. Miscellaneous items which do not make up the bulk of the day's business, such as rent and taxes, will go into different columns of the journal. Where there is an important class of such items, as invoices for goods bought by you, you may design a special record book for it, which will in fact be the debit and credit columns formerly appearing in the general journal under that heading.

These totals which you secure from the sales slips, the cash vouchers and the automatic register after clos-

ing time are sorted out and focused into larger totals under the proper headings on the various ledger pages. The gist of every transaction passes on to bigger headings, such as expense, cash, merchandise, discount and interest; and finally to the last focus or the grand total —the balance sheet. From the sales slip record, "Two sacks of Sunset Flour, $1.50," the grocer carries the amount, $1.50, as a part of the day's total to the credit side of the merchandise ledger and the debit side of the cash account. When the monthly balance is taken, this item is entirely without individuality in the general entry "Total Sales, $4,120.12."

Where a purchase or sale is made on credit, you may need something more definite than a sales slip record, by which to follow up the collection or payment of the bill, the taking of a discount or the payment of interest. This is easily done by giving each creditor or credit customer a ledger page so that you may at all times know separately his exact responsibility to you and yours to him. From your original entry, the bill of sale or purchase invoice, you will, therefore, post each credit sale or purchase to its proper page in your customers' ledger or purchase ledger (Form IV). You can then focus the total purchases or sales under the proper headings without the identifying names. When a customer has his $1.50 purchase of flour charged, you note his responsibility, $1.50, on his page in the customers' ledger, enter that amount as a part of the total shown to be due on the "accounts receivable" page, and on the proper "merchandise" page, see that a $1.50 credit is entered, showing that amount of stock surrendered (Figure XIII).

Some businesses use a filing card for each individual credit sales account and others a series of loose leaf ledger pages. The routine is the same—posting of the

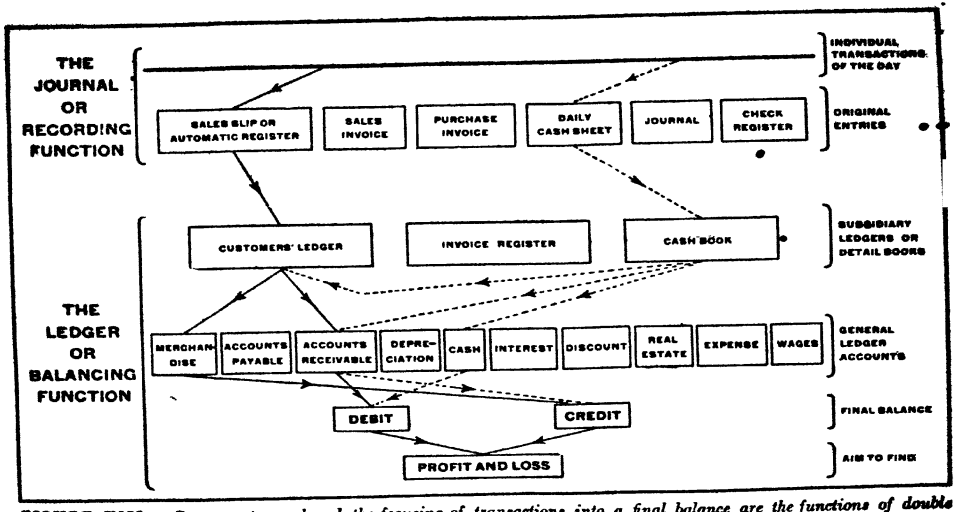


FIGURE XIII: Permanent record and the focusing of transactions into a final balance are the functions of double entry books. The solid arrow shows how a credit sale finds its way to the balance sheet, and the dotted arrow indicates the process of recording payments on account. The number of subsidiary books may be increased as desired

sale from the bill or sales slip, the debit to the customer on his individual card and the credit to him when he pays; with the proper entries to merchandise, accounts receivable and cash. The card or loose leaf system is easily expanded or changed to suit your individual needs, and is especially adaptable to small or irregular accounts and to the business where many bookkeepers are required on the accounts at one time.

It is a common practice to handle the accounting of a business without other books than this ledger of charge accounts, the purchase ledger, the cash book, sales slips and invoices. Profits, expenses, the balance sheet and the present worth of the company are not given by these accounts. Such a system is not complete; a general ledger is necessary to round out your business information. This final ledger focuses upon one page your total merchandise received and sold; on another, your accounts payable; on a third, your accounts receivable, and on other pages your cash totals, your various groups of expenses and whatever other items are desired; it gives a close check on your physical inventory and keeps you apprised of your expenses, profits and standing. The principle is simple—debit against credit with the record of all business transactions and a balance struck under the headings that are important to you.

The general ledger focuses the financial secrets of the business. It is an epitome of the whole business and like the store-keeper's purchase ledger belongs only in the hands of the proprietor or a responsibile head bookkeeper, while the other accountants can give their full attention to the one or two volumes in their charge.

In almost any business one or more special books can be devised for the sake of convenience in separating or following certain classes of transactions. The manufac-

turer or dealer who makes many purchases will use an invoice register (Form IV) where he keeps track of bills for purchases until they are checked with the goods and paid. Should the original bill be lost, the register tells the accountant when to forward a check in order to take the discount. Where bills are few and easily borne in mind, however, they are first checked against the new stock, then entered in a ledger and finally placed in a tickler file under the discount date.

If cash transactions are numerous you may avoid the transfer of details by keeping a daily cash sheet or a system of petty cash vouchers from which totals only are posted to the regular cash book. Other memoranda, in book form, are often kept about notes payable and notes receivable. The register where checks are listed as issued, is now usually replaced by a plan of making carbon copies of all checks and posting to the ledger cash and other accounts from these slips.

DOUBLE *entry fully performs the recording and the balancing functions—single entry books cannot be balanced, and possess no quick test for accuracy.*

Such impersonal accounts as merchandise, expense, profit and loss, occur only in what is termed double entry bookkeeping. A store-keeper found a five dollar bill by his counter and was puzzled over the necessary bookkeeping entries; it was evident that cash should be debited but without other entries that would make his profit for the day seem deceptive—would make it appear that his average selling price was more liberal or his expense less than was the fact. Chance, not sales, deserved to be credited. You hand your monthly rent to the landlord and credit cash, but your books tell only half the story if you neglect to debit the cause—your

rent account. Double entry meets this need.

When you make single entry of a transaction—when you keep purely single entry books—you do not split up a transaction. You disregard chance, rent, merchandise, accounts payable, and keep only personal accounts—what you owe and pay others; what others owe and pay you. In case of a dispute over your rent for the past year, you might have to pick out the rent payments from among purchases, wages and miscellaneous cash items. What slight additional work double entry causes, it is likely to save in the end. While on many unusual items double entry would require entries on two ledger pages as against one in single entry, by adding the credit slips, you can handle fifty credit sales by a single entry on each of fifty customer cards, together with only two additional entries—one total to accounts receivable and another crediting merchandise. Many more or less incomplete forms of double entry are in use, however, carrying such of the elementary impersonal accounts as are essential. A simple but complete double entry system is likely to be more valuable to the man who wishes to progress solidly in his business.

Cost accounting merely carries further one phase of double entry bookkeeping, that of keeping accounts with things as well as persons. In organizing your cost accounting, you merely reserve a ledger page or account for each department or division of the total cost which seems significant. Your scheme of division is elastic and can follow the departments in the store, the individual products of the factory, or costs that go into office operation, farming or contract work. When you know what a line of goods or a class of work is worth, you can prevent a blind cut in price and reassure yourself about the daily tendencies of your business.

In a Kansas hardware store, where old-fashioned bookkeeping methods were continued because seemingly inexpensive, the proprietors, facing an unfavorable year,

HOW THE TWO ACCOUNTING METHODS COMPARE

SINGLE ENTRY	DOUBLE ENTRY
I. You can get a profit and loss statement from single entry accounts by detailed work, but you cannot check your net profit nor show which lines pay best.	I. You can get a profit and loss statement from the books, can check it and show the sources of gain or loss.
II. By counting or valuing your impersonal items physically, you can get a statement of assets and liabilities.	II. Double entry focuses naturally into a balance sheet with no necessity of an actual count.
III. Single entry furnishes no adequate check upon the accuracy of your bookkeeping.	III. The various accounts in double entry work, including balance sheets and profit and loss statements, prove your work.
IV. Single entry ledger pages are restricted to personal headings. You cannot keep impersonal or nominal accounts without extra detail and even partial double entry.	IV. Double entry allows personal, real and nominal accounts showing not only the party to the transaction, but the complete exchange and the division of price into whatever costs, expenses, profits, and markups are desired.
V. The accuracy of postings can be checked only by cumbersome methods.	V. Trial balances regularly prove your postings.
VI. Present worth, stock on hand, general expense and factory costs are not available under the single entry bookkeeping system.	VI. Double entry will conveniently furnish the figures which establish loss in case of fire or burglary as well as definite cost and expense totals and statistics.

gave orders to discontinue one of the departments. An ambitious employee in the unlucky department asked permission to have the expenses of that section kept sepa-

rately. The result not only showed that his department was a profit-maker, but induced the proprietors to extend the cash book and journal sheets, giving columns for receipts and disbursements by departments throughout the store. The general expenses are apportioned among the different sections and losses as well as profits are thus localized.

Modern bookkeeping is built around this idea of testing the various parts of business so that your shop or store may be expanded in profitable directions, and any sign of sick business can be cured before it spreads to serious dimensions.

When you install a new set of books or make over your old system, therefore, study your business carefully and guide yourself not by the forms of bookkeeping routine, but by the principles. Aim to secure the least involved system which gives you absolute accuracy, promptness and the figures on which you must build for success. Look beyond the forms and get records that are accurate, balances that clear your vision of details and spotlight the particular totals which prove your success, your mistakes and your standing, with, finally, such statistics as give you a picture of your tendencies.

THE ways of judging your business, past, present and future, are many and devious. In fact, to judge your business fairly, you must review the past, know the present, and judge the future from what you have done and what you are doing, coupled with a careful survey of the field in which you operate.

—Henry Clews
Founder, Henry Clews & Company

VIII

HOW TO HANDLE PURCHASE ACCOUNTS

By J. M. Cobb

ASTONISHED to learn that he had not earned his bonus, although he was positive that he had done a bigger and better business than ever before, the manager of the furniture department in a large city store demanded a minute examination of the records. This brought to light the fact that the department was charged with dining room furniture of a certain make to the extent of $2,000, which had been paid for, but neither ordered nor received. Further developments showed that a clerk in the accounting department was in collusion with the manufacturer of these goods.

It had been the custom in the store to pass all invoices to the receiving clerk and department manager to be checked, before they reached the accounting room. The invoice clerk took advantage of this lax system to help himself and his friend, the furniture manufacturer, to a considerable sum of the company's money. He merely added a figure to both the amount and quantity of the bill, which already bore the O. K. of the proper departments, and the auditor in due time passed it for payment without hesitation.

Such a thing could not have happened had a proper method of handling purchase accounts been in use. The store system was thoroughly overhauled and thereafter

the trusted mail clerk was instructed to use a safety punch to indicate on every invoice, when it arrived, the full amount of the bill, regardless of whether or not it was correct.

REGISTRY *of each invoice on its receipt prevents its possible loss and the failure to take discounts; the voucher method of making payments on account.*

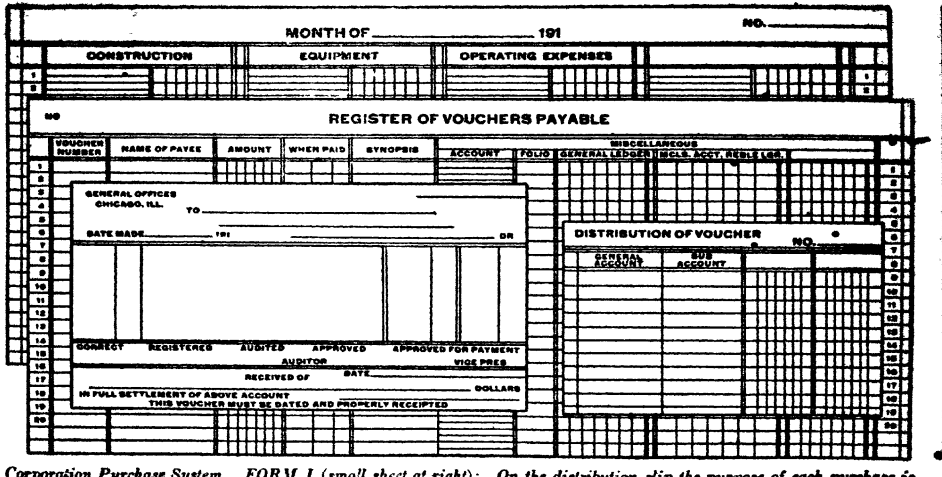
To avoid the possible loss of invoices and the consequent loss of discount, every bill should be sent immediately upon its receipt to the accounting department where it is given a number and entered with the details necessary for its identification, on the invoice register. The amount, nature and price of the goods, together with the date when payment is due, should be indicated in the columns provided. The invoice or its copies may then be sent to the proper departments to be checked. The register indicates the approach of the date when payment must be made, and a delayed or lost invoice can be traced through the departments which have handled it and recovered in time to save the discount by prompt settlement.

In any except a small business, a suitably arranged voucher system is probably unequalled for the payment of bills. It serves six distinct purposes:

In the first place, it is the most satisfactory method for systematizing the course of a bill from its receipt to its payment, for it compels every bill to go through a certain regular procedure.

Second, it affords opportunity for approval of every bill by the auditor and the manager or proprietor, thus preventing any payment from being made without your knowledge and sanction.

Third,—and this is its primary function—it serves



Corporation Purchase System. FORM I (small sheet at right): On the distribution slip the purpose of each purchase is noted. FORM II (small sheet at left): The voucher contains all items being paid. FORM III (two upper sheets): Purchases are entered on the lower sheet and further distributed on the upper form of voucher ledger

you as a ledger account with your creditor, obviating the necessity of having on the ledger the account of every seller from whom you buy.

Fourth, it acts as a distribution ledger, every expenditure being distributed to its proper charge account.

Fifth, when returned by the seller, the voucher serves as a receipt. Since the check number may be put on the voucher, the creditor receipts also for the medium through which payment was made.

Sixth, it binds together all data bearing on your firm's transactions with any house from which it buys.

Distribution of items to their proper charge accounts may be made on and posted from the voucher itself. One objection to this, however, is the fact that it makes public to a certain extent matters with which your firm only is concerned.

To remedy this fault, the distribution slip shown in Form I is used. These slips should be put up in pads and may be of just sufficient size to accommodate the names of the accounts to which the voucher is to be charged and the amount chargeable to each. The voucher clerk fills in a slip for each voucher and indicates what the bill is for.

Where the number of operating or other accounts to be entered is large or the distribution intricate, it is well for the clerk to have before him a tray of rubber stamps with the names of each of the general accounts and if possible, each of the sub-accounts. With a little practice he can handle these very quickly. The slip is attached to the invoice, which is then ready to have the voucher drawn for payment.

The voucher can be of simple design, as shown in Form II. The body of the voucher should contain only such a brief synopsis as will identify the account, with-

out specifying quantities or prices, thus avoiding undesirable publicity. If a single invoice is vouchered it is necessary to state only the date and amount and the invoice number. If more than one invoice are covered, they should be listed separately and the total extended. If any deductions are made, these should be shown. In the case of a statement, where one or more invoices are omitted, their dates and amounts should be shown.

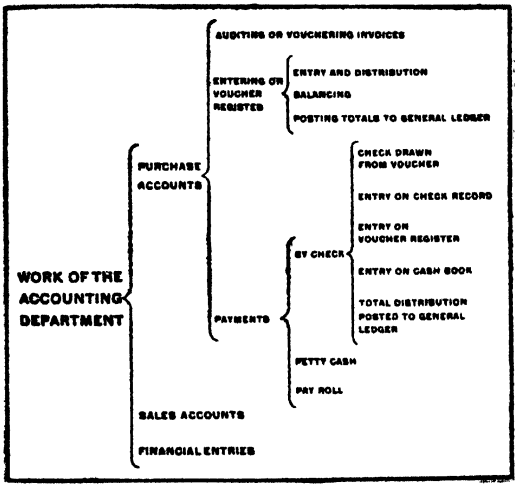


FIGURE XIV: This chart outlines the duties of the accounting department and especially the divisions into which the work on purchase accounts naturally falls

Form III is a loose leaf voucher register designed particularly for record of vouchers and distribution of entries to meet the requirements of corporation accounting where a large number of accounts, both general and sub-

sidiary, have to be considered in distributing the amounts. Columns are provided for miscellaneous general ledger items, for a miscellaneous "accounts receivable" ledger, and such other sub-ledger or account as may be used. Additional columns may be added as desired. On the other side are columns with the general captions "Construction," "Equipment" and "Operating," and a fourth similar column for any special purpose.

Postings to the register are made from the voucher or distribution slip and thence direct to the subsidiary books. The advantages of this register form are that it is very compact, makes a comparatively small record book, is simple and will accommodate a wide classification of accounts. It does away with a multitude of columns, which are awkward to use and subject to error.

The voucher, when registered, should be so marked, and certified by the auditor. If the approval of the head of the department is required, it should receive his signature and go from him to the final official, who approves it for payment. Stripped of all papers, the bare voucher is then sent to the treasurer for payment.

Remittances may take the form of a check, in which case the payee receipts the voucher. A great deal of work, however, is saved and a better record obtained by converting the voucher itself into a voucher check. For this purpose a stamp similar to this is used:

THE CITY NATIONAL BANK
Will pay this voucher when properly receipted.
No. . . . . Treas.

A safety punch should mark in the amount to prevent alteration. The counter signature of the president,

DATE		AMT. INVOICE	WHEN PAID	INVOICE NUMBER	TERMS	WHEN DUE		DEPT. A.	DEPT B.	DEPT C.	DEPT D	DEPT. E.	DEPT F.	DEPT G.	DEPT. H.	SUNDRIES

CHECK REGISTER

DATE	IN FAVOR OF	REMARKS	GROSS AMT	GROSS AMT		DISC T	OTHER DEDUC-TIONS	CHECK NO	AMT CHECK	TOTAL FOR MOT	DEPOSITE DATE	DEPOSITE AMT.	BALANCE

SARANAC LAKE N Y _____ 191

M _____

_____

ENCLOSED PLEASE FIND CHECK IN SETTLEMENT

OF INVOICES AS STATED NO RECEIPT REQUIRED

W C LEONARD & CO

Store Purchase System. FORM IV (back sheet): Each invoice is entered in this loose-leaf purchase journal. FORM V (front sheet): The statement voucher is sent out with each remittance. FORM VI (middle sheet): The check register gives details of payments, discounts and the bank balance

when required, is already on the voucher when approved for payment, and is not again necessary as it would be if a check were issued.

It is a good plan to prepare all vouchers at the end of the month so that only one voucher is necessary to cover the entire monthly account of any one payee. All invoices or bills which must be paid promptly during the current month, to take advantage of cash discounts, can be sent to the voucher clerk bearing a sticker with the word "Rush," printed in red. Let it be a rule that these be vouchered immediately.

HANDLING *purchase accounts without use of a voucher simplifies the routine of payments in a medium-sized business and keeps a constant check on errors.*

In the small business, a voucher system may be too cumbersome. A small department store operating twelve distinct departments has a simpler system which has proved successful. This business pays most bills usually weekly, taking advantage of all possible discounts.

When the invoice is received, it goes first to the accounting department, where a form is stamped on it containing spaces to record "entered," "checked," "compared," "corrected" and "paid." It is then given a serial number which is recorded with a numbering machine both in the upper right-hand corner and also after the word *entered*. This number identifies the invoice all through the accounting process. Before being checked for corrections it is entered in the loose-leaf purchase journal (Form IV).

In addition to the details of the invoice given on the left page, the form contains columns on the opposite page for departmental distribution. At the end of the month the totals only of each of the departmental col-

unins are posted to the general ledger as a charge to each of these departments and a corresponding credit given the purchase account. After the invoice has been checked in the receiving room and the proper department, it is returned to the accounting room, where it is filed alphabetically preparatory to payment.

Checks are written direct from the invoice. In this way, attention is immediately called to any notations concerning errors, corrections or claims. In remitting, the checks are accompanied by the statement voucher (Form V) on which are listed all invoices covered by the check with their designating numbers, deductions and corrections. Carbon copies of these statement vouchers are filed alphabetically and may be tipped together in exact date order under each seller's name.

By this method all statements covering the entire account with any one seller are together in such shape as to serve all the purposes of his purchase ledger account. The invoices themselves are stamped "Paid" and filed numerically for reference.

The statement vouchers are checked against the original entries in the purchase journal. The date of payment is entered in the "When Paid" column, in red ink, so that the items remaining unpaid are more easily detected when taking off a balance proof. The checks for paying are put in pads and numbered serially. As filled, they are entered in the check register shown in Form VI. Columns are provided for the notation of discount and other deductions from the gross amount of the invoice. The form also covers the entire banking record.

An exact list of all unpaid bills is readily obtained at any time by listing and adding the items not yet entered in the "When Paid" column of the purchase journal. The total proves the purchase account in the trial balance

at the end of the month. As the bills are usually paid each week, a practice is made of proving the purchase account thus every week, after the checks for that week are made out. In this way any error is quickly discovered in a list of several hundred bills, without the necessity of waiting for the monthly trial balance.

After the purchase journal is proved against the purchase account on the general ledger the record of purchases is complete. It has been made entirely without the aid of a purchase ledger and at the same time with all the desired results both in general and in detail even to the trial balance of this section of the accounting. There has been no posting of either individual invoices or checks. This has been done entirely in monthly totals, eliminating a large amount of work with a corresponding saving in expense.

MANY business men are never happy unless they have a finger in every detail of their organization. This is not executive control. It is executive interference, and it has very far-reaching results in any business. It robs the departmental managers of responsibility and initiative.

System is the soul of business and is the living spirit of any concern whether large or small. I believe that the business executive should systematize everything down to the smallest detail. It is the small details in business which are so apt to be overlooked; and yet at the end of a year, they have a way of affecting profits to a very material extent. But executive care for details is entirely different from interference in details.

—H. W. Hall

Managing Partner, Wellington and Ward

IX

HOW TO HANDLE SALES ACCOUNTS

By William E. Wilson
Consulting Accountant

WHILE the order clerk who makes out the duplicates of sales orders on various forms for the different departments is usually a part of the accounting force, yet the first actual accounting work in connection with a sales order is after the goods have been shipped.

Attached to the shipping clerk's receipt is his copy of the original order checked and corrected to show exactly what goods were shipped. The office copy of the original order is then turned over to the billing clerk, who makes out a bill against the customer. In cases where the items vary from the original order, explanation is given of the corrections or shortages. This bill is made in duplicate. One copy with one of the shipping receipts goes to the customer. The other goes to the bookkeeper.

It is common custom for the billing clerk to keep a record of his billings and to turn over the total each day to the bookkeeper for purposes of comparison.

Entry of the sales is made by the bookkeeper in two ways. The first entry is on a register of invoices rendered (Form I), the totals of which, when posted to the sales account in the general ledger, constitute a record of the sales and also of the "accounts receivable." The second entry is in the customers' ledger, which is fre-

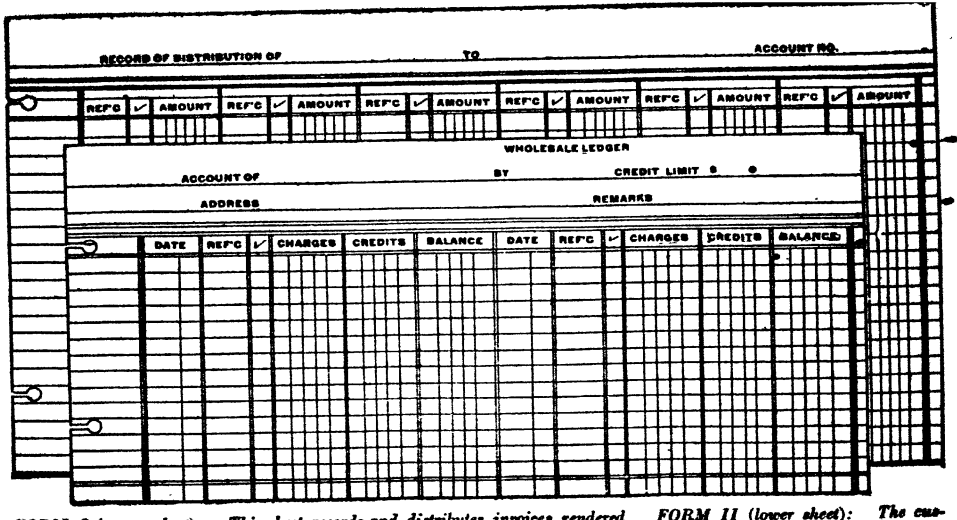
quently in the form of a loose-leaf book (Form II) or card index system, a separate card or page being provided for each customer. The total of the debit side of these customers' records must equal the totals of the debit side of the "accounts receivable" account in the general ledger.

When letters containing money in any form are opened, the amounts received are noted on the letters accompanying the remittances and the money can immediately be prepared for deposit. This is usually the first duty after the opening of a mail. The deposits are made up and forwarded to the bank and the amount entered on the stub of the check book and also in the cash book, from which the totals of deposits are daily posted to the debit side of the bank account in the general ledger.

ENTRIES *and books necessary for properly recording sales—routine work of the accounting department and the right original entry and balancing forms.*

The next duty in connection with the receipt of moneys is to list the receipts on the daily cash sheet (Form III). There can be as many amount columns on this cash sheet as there are departments under which sales are to be divided. The receipts are itemized on the sheet to show the name of the remitter, the invoice or character of purchase that the remittance was intended to cover, character of funds by which payment was made, and other memoranda needed for reference.

The totals from these cash sheets are daily carried forward to their equivalent columns in the regular cash book, from which receipts on account are posted to the credit side of the "accounts receivable" account in the general ledger. From the cash sheets are also posted the



FORM I (upper sheet): This sheet records and distributes invoices rendered. FORM II (lower sheet): The customers' ledger contains details of each charge sale and each payment on account. The balance column shows the condition of an account at any minute

credits to the individual accounts in the customer's ledger, or if duplicate bills are used instead of ledger cards or sheets, these are filed among the paid accounts.

The use of the purchase invoice or voucher register and distribution sheets, of the sales order record, customers' ledger and cash book eliminates to a great ex-

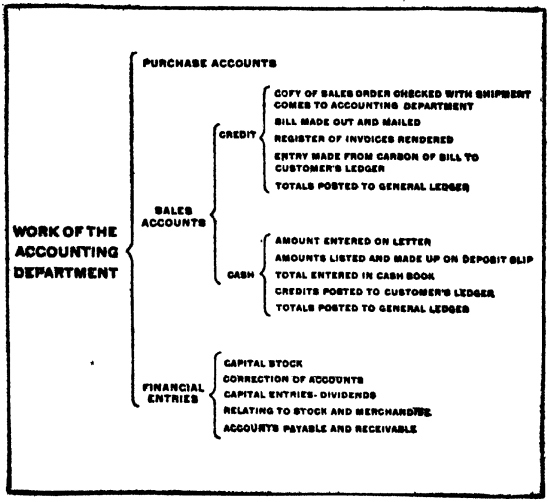


FIGURE XV: The work of the accounting department having to do with sales and financial entries is given here. The latter entries are relatively infrequent but important, and are generally made through the journal

tent the need of a journal, the postings to the general ledger being made directly from the above named records. There are, however, certain entries that cannot properly find a place in any of these subsidiary records and for these a journal becomes necessary (Form IV).

The first of these are financial or organization entries.

JOURNAL ENTRIES FOR THE MONTH OF 191 AFFECTING

DAY	ENTRY	DESCRIPTION AND AMOUNT	POSTINGS CHARGES	✓	✓	POSTINGS CREDITS

RECORD CASH RECEIVED ON ACCOUNT OF MONTH OF 191

DAY	DETAIL	DESCRIPTION AND ACCOUNT AFFECTED	CREDIT TOTAL	CREDIT POSTINGS	CHARGE POSTINGS	CHARGE DISCOUNT	CHARGE FREIGHT	CHARGE NET CASH

NOTES AND BILLS PAYABLE

DATE	NO.	DRAWER	FAVOR OF	ACCOUNT OF	TIME	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	AMOUNT	REMARKS

FORM III (middle sheet): The daily cash sheet shows the day's receipts. FORM IV (top sheet): This is a simple journal form used for general distributing entries. FORM V (lower sheet): This record of notes payable is a valuable subsidiary record

They relate to the financial transactions on which the business is founded, the credit or liability account, under which the issue of capital stock is placed, the original cash account before the funds are transferred to the bank accounts, the issue of bonds or mortgages or other funded debt, and the original purchases of real estate or other large purchases not properly distributed through the voucher register.

Another class of accounts that usually require journalizing are those relating to debit and credit obligations in the form of promissory notes. The general ledger contains a "notes payable" account and a "notes receivable" account. When a note is given by the business in payment for a purchase, a journal entry is made which debits "accounts payable" and credits "notes payable."

In the same way, when a customer gives a note in payment for a purchase, a journal entry is made which credits "accounts receivable" and debits "notes receivable." In both of these cases the individual accounts on the subsidiary records are balanced by the notes.

When you give or take a promissory note, you pay or receive interest, which is really wages for the use of money. Assume, for instance, that you give John Jones your note to run three months at 6 per cent for goods whose value is $200. You include the sum you will have to pay for interest in the amount of the note, making a total of $203. The transaction appears in the journal as follows:

Notes Payable to Sundries		$203.00
Mdse. account	$200.00	
Interest	3.00	

While entries of notes payable and receivable pass to the general ledger through the journal, yet, as a matter

of convenience and to permit a more complete record of such transactions, a "notes payable and receivable" record book is used. This is a specially ruled book in two parts, one for notes payable and the other for notes receivable (Form V). The notes as issued or received are entered in this record and space is provided for full details concerning the notes, the bank at which they are payable and the date on which they are due. By means of this record or through a tickler device the attention of the bookkeeper is called to notes a few days before they become due.

Subsequent to the original organization or capital account entries there may be other financial entries that require journalizing. New stock or bonds or mortgages may be issued to obtain increased capital; the funded debt in the form of bonds or mortgages will be canceled by payment; dividends to the stockholders will be issued; a reserve fund may be established or other transactions take place requiring the opening of new ledger accounts and posting from journal entries. Depreciation of plant and equipment is a credit entry which always reaches the ledger through the journal.

While the correction of accounts can usually be made by the use of debit and credit memoranda in the subsidiary records, yet when such corrections are unusual they also require special journal entries.

WHEN business was less competitive than it is today, business men were satisfied to have an analysis of their financial records made once a year, and not until that analysis was complete had they any real idea of their financial condition, or the results of the year's working. Under modern competitive conditions, such a condition of affairs is becoming less and less possible.

—Edward Wade

X

REPORTS THAT GUIDE THE BUSINESS

By J. M. Cobb

GRADUALLY the executive is getting away from the idea that efficient control of his business necessitates constant personal supervision of details. The tendency is rather to bring those matters which demand his attention to him in summarized form, to concentrate his work at his own desk instead of requiring that he go to the source of his problems and draw his information from constant personal investigation in the various departments. Many a business man spends ten hours a day keeping in touch with details which a few concise reports would give him in one-fifth of that time.

Based on neither judgment nor guess-work, such reports afford an accurate means for promptly correcting errors or extravagances in policies and methods, checking the accumulation of otherwise inevitable losses, and quickly developing plans which results have shown to be profitable. The value of the periodical statement no longer lies merely in the fact that it tells the merchant or manufacturer that his business has made or lost so much during the year and that he is in sound financial condition or on the verge of bankruptcy. It does, indeed, show the net worth of the business and its financial condition, but of infinitely greater value, it tells which operations are being carried on at a profit and at what

margin, so that the more profitable lines may be retained and the less profitable discarded; further, it shows which lines are causing a loss in time to apply the remedy.

In his daily reports the business man ordinarily needs to know the following things:

(1) Total Sales.
(2) Total Receipts.
(3) Total Purchases.
(4) Cash on Hand or in the Bank.
(5) Maturing Notes Payable.
(6) Maturing Notes Receivable.

This material can be given conveniently on a single card (Form I). No figure is valuable of itself alone. Its value lies in its relation to other figures of its kind, and for this reason every report, daily or monthly, should present records of the corresponding previous period.

> DAILY *and monthly reports which reveal the up or down tendencies of a business, and catch little leaks before they have time to do irreparable harm.*

Some men make their daily reports extend far beyond this simple accounting statement. One executive, for instance, has a daily report of orders received; another of orders shipped; a third showing the records of the billing department, with the number of invoices made out by each operator; a fourth from the correspondence department. The number of labor and departmental reports may be multiplied indefinitely for the purposes of different officials, and the character of each business will determine how many such records are needed.

Monthly reports are most valuable from the executive's point of view, because they cover a period extensive enough to allow satisfactory comparisons, and show

tendencies and conditions. Such reports should by all means show the financial condition or balance of your business up to date, the trend of profit or loss and its sources, the collections and obligations falling due shortly, and essential details of assets, liabilities and inventories.

The basis of the monthly report is the trial balance. The accounts listed on it are analyzed so as to show in detail the causes which have produced the results presented on the balance sheet. A little care in the arrangement of accounts on the ledger will facilitate the taking of the trial balance and the arrangement of it in such shape that the executive, even though inexpert in

DAILY REPORT												
DATE	RECEIPTS	LAST YEAR	DIS-BURSE-MENTS	LAST YEAR	BANK BALANCE	LAST YEAR	SALES	LAST YEAR	BILLS PAY-ABLE	LAST YEAR	BILLS RECEIV-ABLE	LAST YEAR

FORM I: This daily report card gives the information necessary in a moderate sized business. The card contains thirty-one lines and is used for one month

accounting details, may readily understand its significance. The asset accounts should appear in the first part of the ledger and the liabilities in the last part. Between these two general divisions the expense and revenue accounts should be grouped. Each class is to be kept distinct from the others.

Fixed assets, representing investments in plant, buildings or machinery in a manufacturing business, as well as real estate investments, fixtures, furniture and other such items in the case of a merchant, are easily learned in accurate accounts at the end of any month. This is also true of cash, accounts receivable and similar liquid assets. Current outstanding accounts are subject to a deduction for possible losses, but this amount, instead of being distributed on the basis of semi-yearly percentage, can with fair accuracy be apportioned every month.

Liabilities in most businesses can be ascertained without difficulty. In the case of items which accrue at long intervals, such as taxes and insurance, a monthly proportion can be accurately determined and included in the current accounts of any month, so as to show a complete statement of liabilities.

The greatest obstacle to contend with in preparing monthly reports is the inventory account of goods, merchandise, unfinished work and other items of supplies and material. There are three ways of determining fluctuations in these accounts.

In the first place, an actual inventory may be taken every month. There is in many businesses a legitimate objection to this because the conduct of business is more or less disturbed at the inventory-taking dates.

If possible, the stock-keeping system should be arranged on the plan of a perpetual inventory. This is entirely feasible in most lines, and accurate results can be secured at a minimum of clerical expense. Some retail businesses, however, which carry a multitude of small articles in broken packages, find the perpetual inventory plan of stock-keeping impracticable, because the clerical work involved renders the expense prohibitive.

In businesses where it is not advisable to have a per-

petual inventory, or go over the stock frequently, the monthly variations in inventory value may be based on estimates. You can determine this value in the following way: Add to the inventory which closed the preceding month all purchases made during this month. The result is the total of all stock which was in your store. To find the amount remaining, simply deduct the purchase price of goods sold, which you get by subtracting from total sales the total amount of mark-up on the goods sold—an average percentage being the basis for this figure. Reduced to dollars and cents, this method is as follows:

Inventory (estimated January 31)		$20,000
Purchases for February		23,000
Total stock in store during February . . .		$43,000
Gross sales for February	$33,000	
Estimated mark-up (33⅓%) . . .	11,000	
Purchase value of goods sold . . .	$22,000	$22,000
Estimated inventory (February 28th) . . .		$21,000

While this method is not absolutely accurate, the results are sufficiently close to the actual figures to be relied on.

In a manufacturing business in which a comprehensive cost accounting system is used, this difficulty in ascertaining inventory value is entirely overcome, because as a part of such system an exact running account of the value of unfinished work and supplies has to be maintained.

Presentation of the information shown on a financial statement in such a manner that a knowledge of accounting is not necessary to comprehend it is important. Many business men conducting large and successful businesses, and many bankers and financiers eminently

skilled in financial matters, although good business men and good bankers, do not know enough about accounting to understand why accounts payable show on the credit side of the ledger and accounts receivable on the debit side. In such cases an intricate statement is not fully understood by those who should profit most by it and merely defeats its own purpose. Comparisons with other periods, and percentage figures connected with

STATEMENT OF FINANCIAL CONDITION								
	JUNE 30 1912		JULY 31 1912		INCREASE		DECREASE	
RESOURCES								
PLANT AND MACHINERY,								
PATENTS, GOOD WILL, ETC.								
SUPPLIES AND UNFINISHED GOODS								
ACCOUNTS RECEIVABLE								
BILLS RECEIVABLE								
CASH								
TOTAL ASSETS								
LIABILITIES								
ACCOUNTS PAYABLE								
BILLS PAYABLE								
UNPAID PAY ROLLS								
RESERVE ACCOUNTS								
CAPITAL STOCK								
SURPLUS								
TOTAL LIABILITIES								

FORM 11: This sheet shows a simplified method of making out statements of the financial condition of your business

profit and loss do more than any array of figures standing alone, no matter how impressive.

Another mistake commonly made is the presentation of results in too detailed a form, so that the salient features do not stand out with sufficient clearness. It is best to have first of all a general statement of your

financial condition (Form II), in which details have been boiled down to comprehensive totals. The general statement can be accompanied and supplemented by

MONTHLY STATEMENT OF PROFIT AND LOSS

	JUNE 30 1912	% OF TOTAL	JULY 31 1912	% OF TOTAL	INCREASE	DECREASE
EARNINGS						
NET SALES						
CASH SALES						
MISCELLANEOUS REVENUES						
TOTAL EARNINGS						
PURCHASES		% OF EARNINGS		% OF EARNINGS		
INVENTORY ADJUSTMENT						
ADVERTISING						
SELLING EXPENSES						
GENERAL EXPENSES						
RESERVE FOR						
DEPRECIATION						
BAD ACCOUNTS						
TAXES AND INSURANCE						
TOTAL EXPENSES						
NET EARNINGS						

FORM III: The monthly statement of profit and loss, made up from the trial balance, shows the net result of operations for the period

other reports showing each particular with greater detail. One report may show the detailed sources of revenue; another the details of expense. In this way the executive grasps at once the general condition and the results of the month's operations, while supporting details come readily from the additional reports.

The profit and loss statement (Form III) is entirely distinct from the statement of the financial condition. The latter is a snap-shot of the state of affairs at one particular moment—when the trial balance is taken; the former is a summary of operations extending over

month. For it the sales and revenue accounts are ght together, expense accounts deducted, and the stment of inventory value is added or subtracted,

STATEMENT OF QUICK ASSETS AND LIABILITIES								
	JUNE 30. 1912		JULY 31 1912		INCREASE		DECREASE	
ASSETS								
ASH								
INVENTORIES								
ACCOUNTS RECEIVABLE								
BILLS RECEIVABLE								
TOTAL QUICK ASSETS								
LIABILITIES								
CCOUNTS PAYABLE								
ILLS PAYABLE								
NPAID PAY ROLLS								
ESERVE FOR BAD ACCOUNTS								
ESERVE FOR TAXES AND INS.								
TOTAL QUICK LIABILITIES								
NET WORKING CAPITAL								
FIXED ASSETS								
PLANT AND MACHINERY								
PATENTS GOOD WILL, ETC								
TOTAL FIXED ASSETS								
NET WORTH								

FORM IV: A statement like this shows the quick assets sharply contrasted with liabilities of a similar kind and is valuable in judging the worth of the business

as the case demands. Details of any of these general groups may then, if desired, be exhibited on supporting statements.

A [illegible] report (Form IV) showing the quick or liquid assets contrasted with the liabilities falling in the same class, is exceedingly useful as a guide in financing and as a basis of credit. These items are really vital in any active business, and the results shown indicate soundness or frailty financially just as much as does the entire financial statement. Many a business has failed because of a disproportionate relation between its available quick assets and its fixed investments. Furthermore, a statement of this kind is in many instances the thing most seriously considered by bankers and financiers in advancing credit.

A statement of liquid resources and debts may also in turn be made the basis for an accurate statement of financial requirements for the succeeding month. It enables you to see just what debts are to fall due, meet maturing liabilities without embarrassment, and avoid the accumulation of surplus or unemployed capital.

THE character, permanency and component policy of any large concern is concentrated in some strong central authority. From him emanate the policies, the ideas, the forces that make the house. And the house's policy is his specific way of doing things. This policy should be instilled into every individual in the concern, but one man originates it—and he must be putting forth a new supply continuously. However vague the policy-maker may be to the outsider, to the business organization he is very real and definite.

—F. J. Selden

PART III—TESTED SYSTEMS FOR KEEPING ACCOUNTS

Keeping up with New Methods

AFTER forty years of experience, I am convinced that success in business depends not only upon natural ability, but upon a thorough preparation and training in improved systems and exact methods. This preparation is especially valuable in these later years when information about the organization and methods of business houses has become more general and competition more keen.

As in the earlier days, the farmer could follow the old-fashioned plow, mow his grass with a scythe, and cut his grain with a cradle, paying little attention to the fertilization of his land or the science of farming, so the business man could, in the crudest and most haphazard manner, meet the requirements of his customers and make money for himself. The automobile is no further removed from the "one-horse shay" than is the merchant and manufacturer of today from the storekeeper and shop owner of yesterday.

He who hopes for success must organize, prepare, enlist method and science, if he would live upon the high plane which business has now reached.

A. C. Bartlett

A. C. BARTLETT

President, Hibbard, Spencer, Bartlett and Company

OF INDUSTRIES

XI

RETAIL ACCOUNTING

By J. F. Wenzel

FOR the retail business of almost any sort you need a simple and well-arranged system of accounting which will enable you to know at any time just how the business is progressing. In a department store it is necessary to show which department is making money and which, if any, is losing money. Accounts should be so arranged that the purchases, sales and cost of doing business in each department are kept separate, just as though each department were a distinct business in itself. Such a check by departments is almost equally valuable in every retail shop and office.

Some merchants still keep their books by single entry, believing that double entry means double work. But by using columnar books or loose leaves it is only necessary to make one extra posting to each department's account each month in order to complete the double entry. The actual amount of additional work involved in double entry is scarcely more than 5 per cent. Yet double entry, with its merchandise account and profit and loss account, which single entry cannot carry, shows precisely how the business is progressing and provides for comparisons of expenses year by year. Furthermore, double entry safeguards against careless bookkeeping by bringing out mistakes as a difference in balancing

the books. Without double entry it is impossible to ascertain whether books have been correctly kept or not.

The following plan shows the order in which to place your store accounts in the general ledger:

Cash
Accounts Receivable
Bills Receivable
Furniture and Fixtures
Vouchers Payable
Bills Payable
Reserves for Depreciation
Proprietor's Investment Account
Department I—
    Inventory
    Purchases
    Freight, Express and Drayage
    Sales.
    Expense
    Salary
    Advertising
    Interest, Profit and Loss
(Other departments follow with the same analysis.)
General Expense
General Salary
General Advertising
Office Expense
Office Salaries
Delivery Expense
General Profit and Loss

These accounts are kept on loose leaves or cards, so that their same relative position may always be maintained.

Every department manager should be provided with a pad of triplicate order blanks, on which he specifies the goods he wishes purchased for his department. He keeps the triplicate sheet as his record and hands the original and duplicate over to the general manager or the buyer for approval. If approved, the original sheet

DISTRIBUTION OF SALES MONTH OF 191

DATE	CLERK NO 1			CLERK NO 2			CLERK NO 3			CLERK NO 4			CLERK NO 5			CLERK NO 6			CLERK NO 7			CLERK NO 8		
	CASH	CHARGE	TOTAL	CASH	CHARGE	TOTAL	CASH	CHARGE	TOTAL	CASH	CHARGE	TOTAL	CASH	CHARGE	TOTAL	CASH	CHARGE	TOTAL	CASH	CHARGE	TOTAL	CASH	CHARGE	TOTAL

WABASH, IND. _____ 191 _____ REMITTANCE VOUCHER NO. _____

PAY _____ ADDRESS _____

CHARGE DEPT	AMOUNT	DATE	CHARGED AND DEDUCTIONS	INVOICE NUMBER	DATE	FULL AMOUNT	DATING %	DATING DAYS	DATING DISCOUNT
			NET AMOUNT						
			DISCOUNT PER LIST						
		AUDITED	GENTLEMEN - THE ENCLOSED DRAFT WILL SETTLE ACCOUNT AS HEREIN WRITTEN IF INCORRECT RETURN UNALTERED $ _____						

THE WABASH MERCANTILE COMPANY,

BY _____

FORM I (lower sheet): This is the voucher on which remittance amounts are entered. FORM VI (upper sheet): This daily record of sales shows the amount of cash and credit business done in each department by each salesman

RETAIL ACCOUNTS

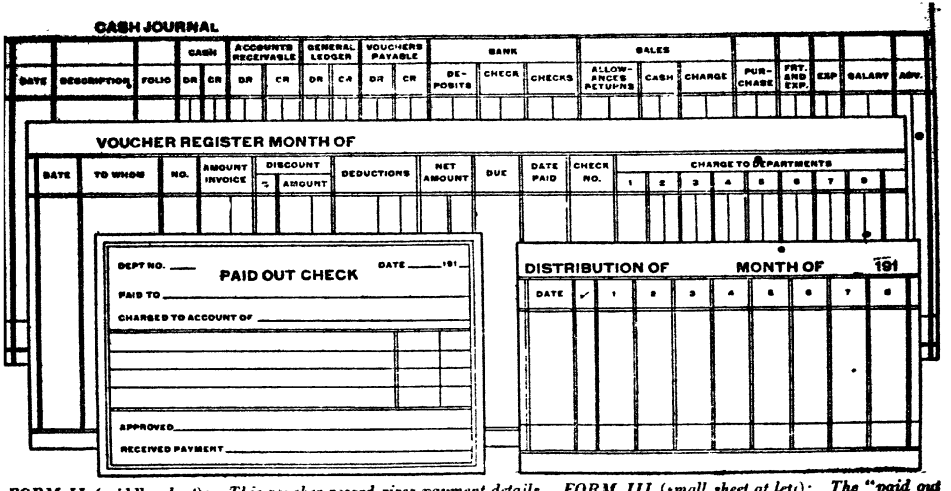
is mailed and the duplicate is filed in the office to await the arrival of the invoice and the goods. When orders are given to traveling salesmen the order is made out on the same form, and when approved, the original is handed to the salesman. These blanks are uniform in size and easily filed.

HANDLING *purchase accounts in the retail store—checking invoices against incoming goods—keeping tab on the little items of expense and outgo.*

When the goods arrive they are checked against the invoice by the receiving clerk and in the department by the manager, who O. K's quantity, quality and price charged. He places the selling price on the goods and also on the invoice for information of the management. After the bookkeeper has figured the extensions and footings, they are ready to be entered on the voucher form illustrated in Form I.

The voucher gives all particulars of the account and is made in duplicate, so that a copy may be filed for reference. The voucher itself is entered on the voucher register (Form II), which then gives the necessary details of settlement. The departments are charged with the goods received by entering the amount in the distribution columns of the voucher register and posting the total of each column to the department purchase account at the end of the month. There is no need of keeping ledger accounts with creditors if this system is used. Vouchers are dated ahead to the date they are due and filed in a tickler.

At the end of the month the total of the "net amount" column of the voucher is posted to the credit of the "vouchers payable" account in the general ledger, and after the amount of vouchers paid during the month,



FORM II (middle sheet): This voucher record gives payment details. FORM III (small sheet at left): The "paid out check" records all expense items FORM IV (upper sheet): The cash journal distributes expense items. FORM V (right sheet): This sheet distributes department expenses

as shown by the "vouchers payable" column in the cash journal, has been charged to this account, it will then, of course, show, as a difference, the amount the business owes its creditors.

When the bookkeeper comes to making out the voucher he refers to the creditor's folder, makes the proper deductions, attaches invoices, letters, credit memoranda and bills of returns to the voucher and hands it to the general manager or other official in charge for approval. After this approval is received the papers are detached and placed in the "Unsettled Bills" section of the file, and the voucher filed by due date in the voucher tickler.

Expenses of all kinds are taken care of by the "paid out check," shown in Form III, which must be O. K 'd by the department manager. Freight and express, salary and advertising items are entered each day in their respective columns in the cash journal (Form IV) and are then divided among the different departments by means of distribution sheets (Form V).

All the direct expense, such as salesmen's salaries, rent, light and insurance, is at once charged to the departments that incur it. The clerks' salaries may easily be divided from the pay roll book each week; rent should be divided according to floor space used; light by the number of kilowatt-hours required in the department, and insurance according to the size of the stock. Overhead expense items, such as the proprietor's salary, delivery, bookkeeping and general office expense, are charged to general accounts, and at closing time these accounts are prorated and charged to the departments on the basis of turnover, or the cost of goods sold, as may be agreed.

In handling sales in grocery, meat and bakery departments, which are largely on a cash basis, and where

prompt service is desirable, cash registers can best be used. In other departments, the ordinary duplicate sales tickets are satisfactory. Each ticket should bear the salesman's number, which may be made to designate both clerk and department by having all salespeople numbered in department I from one to nineteen, and in department II from nineteen to thirty.

A sales ticket is made out for every sale. The amount is also registered by the clerk on a "record of sales" card. The original ticket is kept by the cashier and the duplicate is given to the customer. At the end of the day the cashier sorts the tickets by salesmen's numbers and turns them in at the office, together with the cash. The bookkeeper who usually audits the sales checks the tickets with the "record of sales" cards and then separates cash from charge tickets. Daily sales are then recorded on Form VI, which shows the daily cash and charge sales of each salesman and department.

The "record of sales" card may serve a double purpose. A new one should be given to each clerk every morning. But first the bookkeeper should write on the back the amount the clerk sold that day the preceding year, to encourage an increase. These "record of sales" cards are turned over to the manager after they have been audited. They show him at a glance which clerks are increasing and which are losing in sales.

The accounts with customers should be kept in a separate ledger from the general accounts. The duplicate statement ledger is admirably suited for this purpose, as the statements are made out at the same time the charge is entered, always ready to send on the first of the month. The entries should be made direct from the charge tickets.

The daily postings may easily be proved without ex-

tra labor by the use of markers and an adding machine. As postings are made markers are inserted in the ledger showing the accounts affected. Markers of one color are

PROFIT AND LOSS STATEMENT, DEPARTMENT 1.

SALES		$16,706.52
INVENTORY (JUNE 30)		6,216.32
TOTAL VALUE RECEIVED		$22,920.84
INVENTORY (JANUARY 1)	$5,608.67	
PURCHASES	13,073.42	
TOTAL STOCK IN DEPT. 1 (JAN. 1 TO JUNE 30TH)	$18,682.09	
GROSS PROFIT		4,238.75
FREIGHT, EXPRESS AND DRAYAGE	$215.13	
EXPENSE	722.71	
SALARY	1,541.24	
ADVERTISING	360.85	
INTEREST	425.50	
TOTAL EXPENSE DUDUCTIONS	$3,265.43	3,265.43
NET PROFIT		953.32

FORM VII: This chart shows the method of calculating profit and loss from the records which the expense and merchandise accounts on the books furnish

used to designate debit postings and another color shows credits. In this way many errors in posting are located at once, saving a great deal of time and trouble in taking the trial balance.

> CLOSING *the books and finding the percentage statistics which guide the policies of the business and show where the biggest returns are coming from.*

The total charge sales for the month are then debited to Accounts Receivable in the general ledger; and the amount collected on account for the month, as shown by the accounts receivable column in the cash journal,

s. credited to it, making this account show the total mount due from customers. The correctness of the ustomers' ledger should be tested each month by comaring the total of the balance with the balance of the ccounts receivable account. If the accounts with customers are so numerous as to make several ledgers necesary, an accounts receivable account may be carried with ach ledger, making it possible to prove each ledger eparately.

INVENTORY AT COST (JANUARY 1)	$5,608 67
PURCHASES	13,073.42
FREIGHT, EXPRESS AND DRAYAGE	215 13
	18,897 22
LESS INVENTORY AT COST (JUNE 1)	6 215 32
COST OF GOODS SOLD	12,681 90
GROSS SALES	16,702 08
GROSS PROFIT	4 020.18
	PER CENT
GROSS PROFIT TO SALES	24
NET " " "	5 8
EXPENSE TO SALES	4 3
SALARY " "	9 1
ADVERTISING " "	2 3
INTEREST " "	2 6
TOTAL EXPENSE " "	18.2

FORM VIII: The approved method of calculating turnover on the basis of sales and finding valuable percentages is shown in this chart

To close the books, after inventory is taken, the balance of the inventory, sales, freight, express and drayage accounts are transferred to the merchandise account. The merchandise account is credited with the new inventory, and it then shows the gross profit of the department. This balance is credited to the profit and loss account of the department, and after the expense, salary,

advertising and interest accounts have been charged against it, this account will show the net profit or loss of the department. This, when carried to the general profit and loss account, will show the revenue derived from the entire business (Form VII).

At closing time each department should be charged with interest on the amount of capital used, and the total interest charged to all departments may be credited to the general profit and loss account to complete the double entry. While this practice does not decrease or increase the earnings of the business, it makes the net profit, if any, represent the amount the department made over what might have been realized on the money if it had been loaned instead of invested.

As already mentioned, the general expense should be prorated and charged to the departments on the basis of turnover. The percentage of gross and net profits and costs of doing business should be figured on the basis of sales. (See Form VIII.) Comparative percentage statistics are valuable in every business. With this system of accounting, it is easy to arrange a book in which results may be recorded from year to year for comparison and reference.

MORE *than one business has found itself in the bankruptcy court through an unnoticed leak that had had free play during a long period. The remedy for this state of affairs is an efficient system of continuous analysis of the financial records of a business.*

—Edward Wade

XII

BRANCH STORE ACCOUNTS

By C. A. Ransom

TOO many and too complicated accounting forms in the retail business make accurate posting difficult, and involve too much and too costly clerical labor. If, however, the records used do not furnish enough information, one of the branches of the business will run out of suitable stock or fail to bring in enough money. These two things must particularly be guarded against in branch store management.

Different branch or "chain" stores use varying sets of accounting forms. The details of these forms are fairly standard, but the number of them differs widely with the business and the amount of information desired at the home office.

A system which seems to have neither too many nor too few forms is in use by a corporation operating five branch stores, catering particularly to the ten and fifteen-dollar suit and overcoat trade. This company has no difficulty in getting the information needed for the economical management of its stores from that presented on five forms.

The first sheet (Form I) is the *daily sales report.* This report is the basis of all branch store accounting systems. It is the daily sales record sent to the home office. In this system it lists the various sizes of suits, as regu-

lar, stout and slim, together with the lot numbers and the price of each suit sold.

This report is made out in duplicate by all branch stores and all furnish precisely the same information. The condition of the weather is exactly shown. Temperatures and rain or snowfall are given. As the sales slips are posted to this daily sales report, the bookkeeper begins on his report several hours before closing time, so that, as sales slips come in, the final posting may be done up to the closing hour. Posting can thus be done partially by low-salaried help during spare moments.

RECORDS *which keep the management of a chain of retail stores in close touch with the sales, expenses and condition of stock in each of the branches.*

At the lower right-hand corner of this sheet is a recapitulation of receipts and disbursements of the various kinds of suits and overcoats. "A" indicates a $10 grade, "B" $15, and "C" $20. This sheet shows the number of garments on hand at last report, receipts since last report, sales for the day the report covers, and the number of garments left on hand that evening.

The financial condition of the store is shown by the deposit slips; where a cash business is done, the deposit slip for the day must exactly balance with the sales for the day. Aside from the accounting value, this acts as an excellent basis on which to refuse credit; it is possible for the store manager to say honestly that he is obliged to account for every suit sold by depositing the price value in the bank.

A transfer order blank, shown in Form II, is used to indicate the transfer of merchandise from one store to another. It is possible, in economical branch store man-

DAILY SALES MEMORANDUM

DATE _____

STORE _____ WEATHER _____

LOT	REGULAR	STOUT	SLIM	TOTAL	PRICE

TRANSFER ORDER BLANK

FROM STORE NO. _____

TO STORE NO. _____

DATE _____ 191____

MERCHANDISE

OUR LOT NO.	THEIR LOT NO.	DES CRIP TION	QUANT ITY	REGULAR														STOUT														SLIM												REMARKS	PRICE	TOTAL
				30	31	32	33	34	35	36	37	38	39	40	42	44	46	35	36	37	38	39	40	42	44	46	35	36	37	38	39	40	42														

CHECKED BY

SIGNATURE _____ STORE NO. _____

DATE _____ 191____

RECEIVED BY

SIGNATURE _____ STORE NO. _____

DATE _____ 191____

VERIFIED _____

EXAMINED _____

ENTERED DAILY SALES _____

ENTERED BANK DEPOSIT _____

ENTERED LOT SALES _____

ENTERED LOT SIZES SOLD _____

ENTERED TOTAL SIZES SOLD _____

ENTERED PRICE SUITS _____

RECAPITULATION

	SUITS	O'COATS	SUITS	O'COATS	SUITS	O'COATS
	A		B		C	
ON HAND LAST REPORT						
REC'D SINCE LAST REPORT						
TOTAL						
SOLD TODAY						
ON HAND TODAY						

FORM I (back sheet): This daily sales report is used by each branch store and sent to the main office. FORM II (front sheet): This transfer order form records merchandise that is transferred from one branch to another

agement, to run with a comparatively small stock, when a careful system of accounting for transfers is used. A good system of recording transfers makes this possible. The form shown not only lists economically the transfers made, but has space for any instructions regarding each separate item.

If the manager of a store finds his stock running low, or if he finds himself overstocked with certain garments, he writes or wires the home office, giving full information as to the numbers on hand. While this information is shown in the above recapitulation, yet it might be overlooked by the home manager and, for this reason, branch managers are especially warned to look out for coming demands—to judge tendencies which indicate few or greater sales along certain lines.

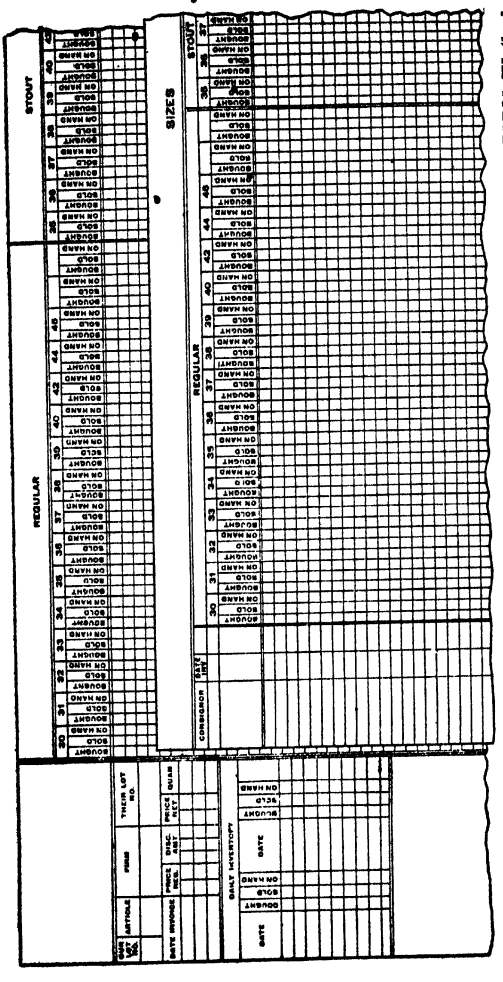
Form III shows the *stock* or *lot sheet*. This provides for the listing of suits as bought and sold. The balance remaining on hand may be struck at any time. The different sizes of suits and overcoats are listed, regulars running from thirty to forty-six, with two spaces for sizes larger than the forty-six size. Stouts run from thirty-five to forty-two, with one extra space for posting the odd size.

At the left-hand margin of the lot sheet is an invoice and daily inventory summary.

Form IV is a memorandum form for *inventory of sizes* on hand. It is kept only for the home office, so as to determine what sizes are running low, that prospective "outs" may be ordered.

In connection with the reports from branch stores, which indicate what the probable demand will be, this inventory tends to prevent either an over-accumulation of odd sizes or running entirely out of sorts at any store.

This matter of keeping the stock so sorted as to pre-



FORM III (front sheet): The stock sheet brings branch reports of goods on hand to the home office. FORM IV (back sheet): This inventory of stock is maintained in the home office and is posted from the branch reports

FOLIO NO. CRÉDIT								FOLIO NO. DÉBIT								FOLIO NO. CREDIT								FOLIO NO. DÉBIT								FOLIO NO. CRÉDIT								FOLIO NO. DÉBIT									
	SUITS			OVERCOATS			GRAND TOTAL				SUITS			OVERCOATS			GRAND TOTAL				SUITS			OVERCOATS					GRAND TOTAL SALES																	
DATE	A	B	TOTAL	A	B	TOTAL					A	B	TOTAL	A	B	TOTAL					A	B	TOTAL	A	B	TOTAL																				

FORM V: This form summarizes daily receipts and sales and is posted from reports sent in by the branches. A duplicate slip from the bank where its funds have been placed accompanies the branch store's report

vent the accumulation of odd sizes is one always to look after, especially in branch store management. It is no uncommon experience, even in a single store, to have sizes or patterns, or both, accumulate to an extent that causes large depreciation loss. Many stores lose from this cause approximately from one-half to one per cent of the capital stock. Constant reference to each memorandum and study of its variations will effectually prevent this.

Form V is the final form that is used in this store. It is a *summary of daily receipts* posted from the daily sales reports. Accompanying each daily sales report is a duplicate deposit slip showing in what bank the daily receipts were deposited and the amount. From the daily sales report and this accompanying deposit slip, the summary of daily sales is posted.

Best results are secured from this form by placing as many on a single sheet as there are stores in total; that is, all branch stores and the home office. This sheet, consequently, may be as large as eighteen by thirty inches. The sheets are kept in pad form, posted singly and then bound for reference in a loose-leaf binder. After sales have been footed, the figures are placed in a grand total sales column at the right of the sheet.

A THOROUGH *knowledge of the smallest details of one's business, well-directed effort in work, and the power to organize a business—these are the three foundation stones of success.*

—Edwin A. Potter
President, American Trust and Savings Bank

XIII

MANUFACTURING AND SALES OFFICE ACCOUNTS

By Neil M. Clark

FORMERLY it took three trucks to wheel our ledgers into the vault at night. We turned a search-light into the dark corners and found that we were a long way behind the time. We thoroughly revised the system, and the first day our new plan was in working order a single man carried all the books in his arm at once."

The auditor of a middle western factory gave this account of the great change wrought in his system by a complete revision of bookkeeping methods.

Speed and accuracy are the key thoughts in the accounting system of this concern. The company practically combines manufacturing and wholesaling on a large variety of small articles. It operates thirty departments, sells to retailers direct instead of to the jobber, and handles directly its rather extensive advertising campaigns. Twenty salesmen are on the road continuously. Records on sales require about the same amount of attention in the accounting department as those on the manufacture of the product. Costs are accurately kept and closely bound up with the system.

The company's week ends on Friday. In spite of the fact that the product is so diversified and the number of salesmen and departments is large, the management has, on the following Monday, the exact amount of the

sales and purchases of all departments for the previous week, the sales of every salesman, and the "figured net profit" of the whole concern. A dozen men and girls, not counting employees in the billing department, take care of the entire routine of accounts and the gathering of desired statistics.

POSTING purchase accounts with a view to securing the highest rate of speed and the greatest degree of accuracy—methods of checking the figures.

The accounting routine may be taken to begin with the purchase of materials. When the invoice for a purchase arrives it goes at once to a girl who checks the extensions and the total, so that the purchase bookkeeper receives the invoice correct as far as extensions are concerned. Invoices are entered alphabetically, one after the other, in a purchase journal, which gives merely the date of entry, the name of the seller, the due date, the gross amount, terms of payment, and the number of the department to which the purchase is charged. Three postings are taken from this journal: first, to the purchase ledger, where the seller is credited; next to the bills payable book, and finally to the distribution book.

Loose-leaf volumes are used throughout the establishment in preference to cards. The system is so carefully planned, and records reach the bookkeepers in such well classified form, that three hundred and twenty-five postings in an hour, or an average of five and one-half per minute, are not uncommon. A five-dollar-a-week boy arranges the invoices or charge sheets for each bookkeeper in alphabetical order, just as the accounts appear in the purchase ledger. In the purchase journal, therefore, the day's invoices are entered alphabetically, resulting in an increase of about 100 per cent in the speed

with which postings are made to the purchase ledger. The bookkeeper simply props up the journal in front of him, using his left hand to turn the pages of the ledger while he posts and checks with his right hand.

Another simple device for saving time, derived from common sense rather than from scientific motion study, is the fact that the bookkeeper posts from the place where he *left off* recording invoices in the journal rather than from where he *began*. Starting at the bottom, he works back to the top, posting and checking as he goes; and naturally he also starts at the back of the ledger and works to the front. By the time the right hand has finished posting and checking, the unoccupied left hand has lifted several pages and found very nearly the place for the next posting. With practice the operation becomes almost automatic.

It is impossible to attain the same rate of speed in posting from the purchase journal to the other two books required for completing purchase entries. Since the invoices are originally entered in alphabetical order, the payment dates do not follow one another in any logical order, nor are the purchases consecutive with relation to the department concerned.

Posting to the departmental distribution book is not difficult, however, for it has to be done only once a week, and all departments are taken care of on one sheet (Form I). Besides serving for the proper distribution of purchases, this sheet is used to secure a check on accuracy. When a bookkeeper has finished entering the details of an invoice in the purchase journal he sends it to the department for which the goods were bought. Each department checks in its own goods. The factory is not so large but that one superintendent can take charge of several departments, but the records of each one are

kept absolutely separate. The receiving clerk checks the invoices first against the copy of the order, then against the goods when they arrive. By the end of the week the invoices in each department are totaled and compared with the total charged in the distribution book. A mistake in posting, or the loss of an invoice anywhere along the line, is thus caught at once.

In paying its bills the concern does not use the invoice, but gathers the necessary details from the bills payable book, which is posted from the purchase journal. This book is a loose-leaf volume also, arranged so that new sheets can constantly be added and dead sheets removed. Every future day for three months has one or more sheets, arranged chronologically, on which are the

DEPARTMENT PURCHASE DISTRIBUTION WEEK ENDING _____ 191___

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

FORM I: This form is used for the distribution of purchases to the proper departments. Each department checks up its own records weekly against the total shown in this book

details necessary for the payment of every bill due on that day. In the morning the bookkeeper runs through this list and makes out a remittance blank (Form II) for every creditor to whom bills are owing. As many

bills as possible are paid at one time. The concern finds that its bills bear a great variety of discounts, and the remittance sheet is ruled in such a way as to take care of these. The first column is for the date of the invoice, the second for remarks or the invoice number, and in the next three columns amounts are entered in their proper place according to the terms of payment. These terms are inserted in the box at the top. Net amounts are extended to the fourth, or total, column.

This bookkeeper also makes out the paying check and sends it, with the remittance blank, to the treasurer to be signed. The check book serves as an original entry book of payments. Totals go from it to the cash book and details are entered as debits to the proper sellers' accounts.

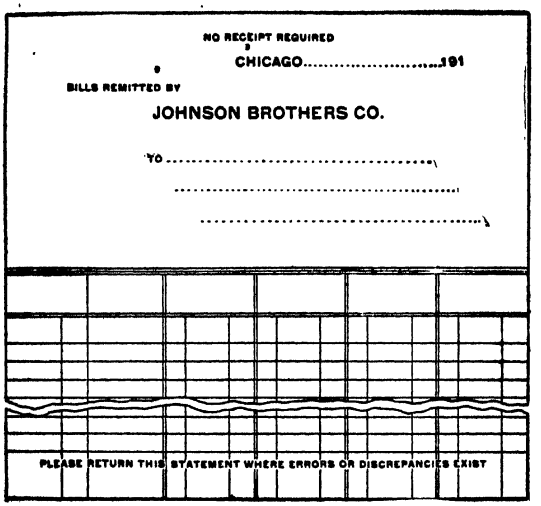
This concern also keeps its sales accounts both speedily and accurately, and draws from them a great variety of valuable statistics. The invoice is made out in duplicate, the first copy going to the customer, the second being the charge sheet from which postings are made.

CHECKING sales price and figuring the profit—using the "census machine" to gather valuable statistics of sales by department and salesman.

From the billing department the invoice reaches the sales accounts department, with the items and prices marked, but without the extensions. Here comes the first check to insure accuracy. With the use of computing machines one girl figures extensions on the invoice copy and another on the charge sheet copy. The two sheets are then compared and they must agree, or the mistake made by one of the girls must be located at once.

Accuracy being insured, speed again becomes the dominant consideration. The same boy who sorted the in-

voices also sorts the charge sheets, separating them first by states to find which bookkeeper they belong to, and next arranges alphabetically the accounts for each sales ledger, binding them in temporary covers to prevent


NO RECEIPT REQUIRED

CHICAGO.....191

BILLS REMITTED BY

JOHNSON BROTHERS CO.

TO .....

.....

.....

PLEASE RETURN THIS STATEMENT WHERE ERRORS OR DISCREPANCIES EXIST

FORM II: This remittance blank goes with paying checks. The extra columns are provided for the entry of bills bearing different discount rates

their becoming disarranged. In this form they go first to those who figure the profit, next to the ledger bookkeepers and finally to girls who dissect and analyze the statistics.

Every article manufactured and sold by this concern has a number. Articles in Department I, for instance, are numbered 101, 102; in Department XV they are numbered 1501, 1502, and so on. Experience and careful statistics in the cost department have taught the

management very nearly the exact cost of every article. These costs are arranged in a profit and loss book opposite the number of the article concerned. This book is revised every two or three months, as new articles are added to the list or old ones are dropped. A profit calculator runs through this book in connection with the charge sheets and marks in red ink on the latter the amount of profit and loss incident to the bill. Losses are indicated by a circle drawn around the amount. The "figured net profit" thus arrived at generally has a percentage of error not greater than 1 or 2 per cent.

The profit figurer catches large and apparent mistakes. For instance, if an item numbered 908 appears on the charge sheet as selling for $2.00, and the cost of the article as shown by the profit and loss book is $3.78, an inquiry is at once sent to the department or salesman concerned. The mistake may be in the number of the article—perhaps the number should have been 809—or it may be that the salesman or billing clerk made a mistake in quoting or copying. At any rate, glaring errors are caught, and the sales bookkeeper receives his charge sheets with practically no errors in them.

He receives them also in such shape that speed in posting is made possible. But, since he must turn the pages of both the ledger and the charge sheets, it is not possible for him to post and check quite so rapidly as the purchase bookkeeper does. He follows the same system, however, proceeding from the back of the book to the front, posting each bill to its proper account in the loose-leaf customers' ledger.

When the bookkeeper is through with the charge sheets a series of valuable statistics is drawn from them. In the first place, a girl totals the sheets on the adding machine to get the grand total of sales for the day.

Another girl goes through each book and, with a card-punching machine, "spots in" the details of each bill on a specially arranged card which shows the date, the

WEEKLY SUMMARY

WEEK ENDING _____ 191__

DEPT.	LAST WEEK'S INVENTORY		TOTAL PURCHASES		RETURNED GOODS		TOTAL SALES		FIGURED NET PROFIT	
1										
2										
3										
4										
5										
22										
23										
24										
25										
27										
29										
30										
RETURNED GOODS										
TOTAL PURCHASES										
LAST WEEK'S INVENTORY										
TOTAL STOCK										
TOTAL SALES										
FIGURED NET PROFIT										
COST OF GOODS SOLD										
INVENTORY ENDING										

FORM III: This weekly summary card gives the total of purchases and sales and the figured profit of all departments. It serves the purpose of giving an approximately exact inventory each week

department and salesman making the sale, its amount, and the figured amount of profit or loss. These cards are run first through an electric tabulating machine to

find the total of sales, as a check on the work of the first girl. The machine then separates the cards in any way desired—according to salesman, or department, or any other classification, and the total of sales for that particular classification is speedily found. A summary of the week's transactions is made on Form III. The concern gets these required statistics for the week in a quick and accurate manner, and they form a definite aid in guiding the policy of the business.

EVERY business must have a start, and as it grows re-organization should be constantly resorted to, as it is rarely that an organization which will carry the details of a small business will prove effective for carrying on a larger one. It is remarkable what an enormous amount can be saved in a manufacturing business when every detail, large or small, is carefully watched through the medium of an efficient system. System is, in fact, the very soul of business.

—H. W. Hall
Managing Partner, Wellington and Ward

XIV

SIMPLICITY IN BANK RECORDS

By J. M. Cobb

NATIONAL banking requirements necessitate so many detailed records in accounting that economy in both the work and the procedure is very important. The methods used by one bank of the smaller class are particularly worthy of the interest of every official in banking, trust and loan service, because of the successful attempt to eliminate all possible extra work and repetition, and at the same time keep the records in such shape that the details can promptly be furnished when demanded.

This bank, with a capital of $50,000, has deposits aggregating a quarter of a million, divided into more than eight hundred individual accounts. The loose-leaf system is used in all of the subsidiary books, from which postings are made direct to the ledgers or other books. All items are entered in detail on the general ledger, so that reference to tickets or other forms from which the entries were made is not necessary.

In handling cash, debit and credit tickets are made for all transactions, including credit remittances for which drafts are drawn. These are entered on a draft ledger (Form I), and the totals of drafts made each day are posted in the general ledger to the bank upon which the drafts have been drawn. The total of exchange

as shown on the draft ledger is posted to the exchange account likewise as a total. The total of the drafts drawn, plus the exchange, balances with the total of drafts issued, as shown on the teller's daily cash balance (Forms II and III). The other details as shown on this form will also agree with the several corresponding details as posted to the general ledger.

RECORDS *for the bank which meet the requirements of the law and show the exact condition of the business—how deposits and remittances are handled.*

The bills and notes discounted are entered in the discount ledger (Form III), and the total of this agrees daily with the debit shown on the teller's cash balance sheet, thus proving that item. Only the total of this is posted to the general ledger. Notes are then entered in a loose-leaf tickler and filed in a pouch arranged according to their maturity.

When notices are mailed for maturing notes the statements are made from the tickler and then compared with the notes themselves, thus avoiding the danger of overlooking any of them or of mailing notices for any which have been paid ahead. This acts also as a check on the notes themselves at all times. If any note is missing, attention is immediately called to it and it is easily traced a week or ten days before maturity.

The notes as a rule are proved once a month to see if they agree with the balance as shown on the general ledger. Credit tickets are made for all discounts paid, and credited as a total to the discount and interest column, as taken from the teller's cash balance sheet.

All remittances of checks to other banks are written up on a simple remittance blank. A carbon copy of this is made, which is filed in a postbinder and the amounts

DRAFTS DRAWN ON

DATE	IN FAVOR OF	NUMBER	AMOUNT	CHECK WHEN PAID	TOTAL	EXCH.	BY WHOM PURCHASED
	BROUGHT FORWARD						
		50					

THE FIRST NATIONAL BANK OF NORTHFORK, W. VA.

PAYER	WHERE PAYABLE	NUMBER	DATE	TIME	WHEN DUE	AMOUNT	DISCOUNT	DATE PAID	REMARKS
			98						
			99						
	CARRIED FORWARD								

FORM I (back card): In this draft ledger are entered the amount and other necessary details in connection with each draft. FORM III (front card): In the discount ledger appear entries concerning bills and notes discounted

of the remittance to the different banks charged to each on the general ledger from these carbon copies. These charges are made as a total, which should agree with

THE FIRST NATIONAL BANK OF NORTHFOLK

NORTHFOLK, W VA.

TELLERS DAILY BALANCE DEBITS DATE_____

CHECKS	CHECKS	REMITTANCES	NOTES DIS	SUNDRY DEBITS GENERAL LEDGER	CASH ITEMS		
			CERTIFICATES OF DEPOSIT PAID	DR RECAPITULATION			DR.
				CURRENCY			
				LEGALS ONES AND TWOS			
				GOLD			
				SILVER DOLLARS			
				HALVES			
				QUARTERS			
				DIMES			
				NICKELS AND PENNIES			
				ACTUAL CASH			
				CASH ITEMS			
				TOTAL CASH			
				CHECKS			
				REMITTANCES			
				NOTES DIS			
				CERT. OF DEP. PAID			
				SUNDRY DEBITS			
				TOTAL DEBITS			

FORM II: On this sheet are entered the items which make up the teller's daily cash balance. This is one side only, containing space for debit entries

the total shown on the teller's cash balance sheet.

The individual ledger is balanced each day and the total of checks and deposits credited to the individual

deposits account on the general ledger as a total; the total of checks and deposits taken from the teller's cash balance sheet and the total of the individual deposits, as

THE FIRST NATIONAL BANK OF NORTHFOLK

NORTHFOLK, W. VA.

TELLERS DAILY BALANCE — CREDITS — DATE _____

DEPOSITS	DEPOSITS	DRAFTS ISSUED	CERTIFICATES OF DEPOSIT ISSUED	NOTES PAID	SUNDRY CREDITS GENERAL LEDGER		
			DISCOUNT				
				CR RECAPITULATIONS			CR.
				BALANCE BRO'T F'WD.			
				DEPOSITS			
				DRAFTS			
				CERTIFICATES OF DEP.			
				NOTES PAID			
				DISCOUNT			
				SUNDRY GEN'L. LEDG.			
				TOTAL CREDITS			

FORM II-A: The reverse of the teller's daily cash balance sheet is here shown. This furnishes the necessary columns for the entry of credits

shown on the general ledger, must agree with the total as shown on the individual ledgers each day.

The adding machine is used for all possible purposes.

The remittances to banks are first run through the machine to list the amount of the checks, and afterwards the names of the payers and endorsers are filled in with the typewriter. This plan has been found to be both more rapid and more legible than pencil copy.

After the deposit tickets and credit tickets are all entered they are filed at the close of the day's business in a deposit ticket file, and at the end of the month are bound and placed in the vault for future reference whenever necessary.

In practical use this system affords an accurate check on everything handled. Much less work is required than by posting every item to one book and then transferring to another, in addition to which the liability of error is very much lessened. The teller's daily cash balance is in reality an original entry without the details of the item.

SYSTEM is to modern business what lubrication is to machinery: the better the means of lubrication the smoother and more efficient the running; the better the system, the greater ease and dispatch in managing small details, and the more time for following out the main paths that lead to success.

—John Younger

DIRECTOR OF INDUSTRIES

XV

PERSONAL AND PROFESSIONAL ACCOUNTS

By Ernest A. Scholz

ACCURATE handling of accounts is relatively as valuable for the records of the farmer or the lawyer, the doctor or the business man out of hours, as for the intricate operations of the large store or the complex details of factory transactions. Men who have acquired the habit of keeping personal expense accounts and have developed that habit into a definite system have found the satisfaction in knowing these accounts worth many times the amount of attention required in keeping them up. Furthermore, the man with an accurate statement of his personal accounts before him is prompted to watch his expenses with greater care and to cut out items which show actual waste.

The first step toward a simple system for the keeping of personal accounts is the definite classification under certain heads of the channels of income and expense. Make these divisions so general that once the classification is determined any item of income or expense can always be entered under one of them. For ordinary purposes such a list as the following will answer your purpose: salary, incidental personal expense, life insurance, banks, rent, furniture and household furnishings, fuel, light, household help and daily household expenses, fire insurance, medicines, vacations, books, magazines

and newspapers, charity, gifts and church donations. Other divisions may be added to suit individual demands. Secure a small journal and a ledger and open an account with each of the classified heads.

The next step is to deposit all income in the bank as soon as it is received. This reduces all money to one source of supply and furnishes a basis for accounting which makes the work simple. Every one of the accounts named above, with the exception of personal expenses, can be paid by check. Thus a stub in the pocket check book furnishes temporary registry of all expenses until they are posted. You may keep your incidental personal expense account by estimating, at the beginning of the week, the amount necessary for this item and drawing a check payable to self for the amount. Opportunity is thus given to enter the total for personal expense in the check book stub, and the record furnished is approximately correct. Of course, a portion of the amount thus drawn may be expended for articles properly coming under other heads, but unless the purchases are of considerable value the recording of them may be neglected.

CLASSIFICATION *of all items of income and outgo is the first step in keeping personal accounts—finding the headings that you need.*

Once a week the receipts and expenditures may be posted to the books in a few minutes' time by simply adding the amounts due to each division, as labeled in the check book stubs and making the proper entries. At the end of the month a trial balance may be made up, showing the condition of each account for the month, as well as the total expense for personal and household affairs. Salary due, cash in the bank, fuel and house-

hold goods, furniture on hand, and so forth, may be considered assets; outstanding bills for household expenses, and similar items, are liabilities. It may not seem necessary to carry your monthly balance to this extent, but it is very easily done and has a definite value for comparison from period to period.

At the end of the year a final report is taken from the books, presenting the total receipts and expenditures. This summary shows the expenses of each month, the amount spent in each division each month. From this concise summary much interesting and valuable information may be drawn.

The comparison of the figures with those of other years shows what month and what season demands the greatest outlay of money; it permits you to follow the interesting variations in the actual cost of living; it forms a definite basis upon which to estimate the probable demands during the coming year; and, possibly best of all, it shows where your money goes.

The farmer finds the simple journal and ledger system suited to his needs, but his classification of accounts is similar to that by departments in a large store. Each field has its own account, and all labor, fertilizer or seed used on it are charged against it, together with its acreage proportion of rent or taxes and interest on investment. All product harvested from the field is credited to it at the current market rate, whether actually sold or kept for home consumption.

Two acres of an Ohio farm, for instance, are given up to truck gardening. Half is planted to potatoes and the other half to miscellaneous vegetables. When the proprietor plows his garden or does any work himself he charges the field with an amount of wages equal to what he would have to pay to get the work done by

someone else. This farmer's general accounts are as follows: horses, poultry, dairy, pasture, wood lot, truck garden, potato field, meadow, corn field A, corn field B, and miscellaneous. The last account includes pleasure carriages and similar items which can not be charged specifically against any one part of the farm. Its total is prorated yearly over the other accounts. This system is peculiarly valuable in that it enables the farmer to know precisely what fields or crops are making money for him and how much. When the farm is rented on a share basis, the merchant-owner by this plan can not only secure fair terms, but can trace the profit and loss items and help his man bring the place to success.

DOCTOR, *lawyer, dentist or farmer—the professional man, whatever his line, needs an accurate system of accounts as the basis for his charges.*

By adding a card ledger the doctor or lawyer also can adapt the personal system to his needs. Each patient or client is entered on an individual card, filed alphabetically, which gives the date and itemized service, the amount of the bill, when rendered, and dates and cash received in payment. Running from left to right at the top of each card is a series of numbers from 1 to 31, standing for the days of the month. These numbers serve as a follow-up for the date when payment is expected on an open account. Clips of twelve different colors, one color for each month, complete the equipment.

Assume that Mr. A. C. Smith receives professional services on May 16th, for which the charge is $12, and he promises payment on or before the first of July. An individual card is made out for him and filed under S. The red clip (if that is the color denoting July) is

fastened to the card over No. 1, or July 1. When Mr. Smith pays the clip is removed. If he does not pay as promised the clip calls attention to the fact.

The system may at first seem complicated, but in reality it is extremely simple. It serves the purpose of showing exactly what accounts are open and when they must be followed for payment. On the 17th of July, for instance, the line of red clips indicates accounts due on that date and not yet paid. These cards are taken out, statements are sent and the clips moved ahead to the next date when action must be taken. Dead cards—accounts which have been paid—may be removed to a separate file.

In addition to the routine of keeping these accounts, there are many supplementary devices which relieve your mind of details and avoid small troubles. One of these is a tickler file, which serves to remind you of the minor duties connected with your personal or professional affairs. The tickler is divided by twelve tabbed cards for the months of the year and thirty-one day cards, which may be advanced monthly. Reminder slips filed ahead under the proper date in this tickler come up automatically to suggest that a life insurance premium is due, fire insurance or house rent must be paid, the farm lease renewed, or any one of a hundred other things demands a moment of attention. A glance at the tickler each morning or once in two or three days gets little things done on time. It is simply another way of tying a string around your finger.

Another aid in keeping track of personal and professional affairs is a vertical file kept at the office, on the farm or in the home for receipts, letters and other papers. Letters relating to personal business may be filed for possible reference in alphabetical order. For re-

bills and similar papers you may find filing by subject more convenient. Such an arrangement simplifies work that has to be done, does away with the old story of lost receipts or mislaid correspondence, and proves itself a handy supplement to your accounting system—a convenience which with use becomes a necessity.

SCARCELY *too much emphasis can be put on the value of a thoroughly modern office and factory system. Repeatedly I have been impressed with the extent to which the manufacturer is inclined to depend upon progress in machinery and neglect progress in office and factory methods. If his business is in any way yielding unsatisfactory results the first thing the manufacturer seems to think of is "Get a new machine or hire a new man." This is his common panacea, and hundreds of manufacturing enterprises have failed simply because improved machinery was expected to accomplish what could only be done by means of good sound business system—that established routine of order working along the lines of common sense and sound principle.*

—Alexander H. Revell
President, A. H. Revell Company

PART IV—HANDLING CORRESPONDENCE AND OFFICE WORK

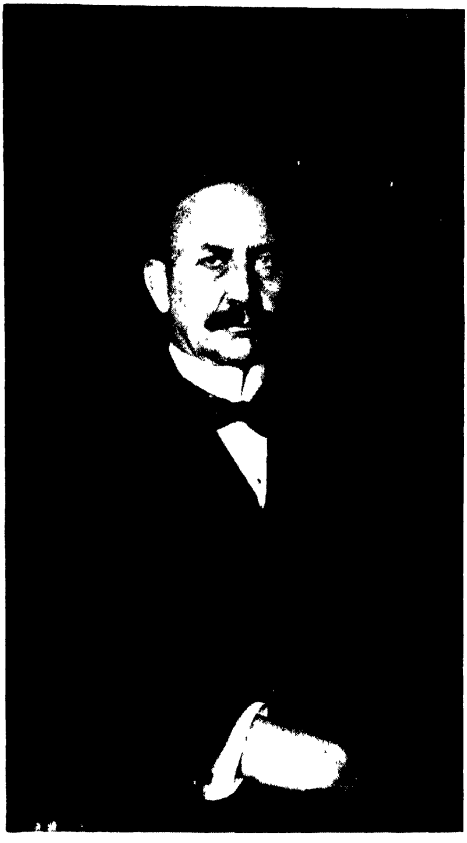
Science in Business

MODERN life has brought forth the modern business man—not the mere trader or merchant, but the man of wide interests, and large outlook, and broad sympathies, and keen vision, and prophetic feeling.

The modern business man is watching for a miracle. He is harnessing the forces of nature, systematizing the forces at his command, combining the powers of industry, regulating the tendencies of society.

His hope is really the hope of the alchemist. The alchemist did not turn lead to gold, but he founded the science of chemistry, and chemistry has made a new and deep revelation of the wonders of creation.

So the business man who has put the fruits of the scholar's works to use and enormously lifted the body of civilization, will very likely never see the lead of modern industrial conditions turned into the gold of an ideal human condition; but he has evolved an idea, he has caught a glimpse of a great truth, he has opened a door through which the truth shall come forth.



D. P. KINGSLEY

President, New York Life Insurance Company

XVI

CORRESPONDENCE DETAILS AND FILING SYSTEMS

By William E. Wilson
Consulting Accountant

EVERY business transaction must pass through your correspondence department at some time. The chief aim in organizing and conducting this department is to handle correspondence and keep records. An over-systematized or complicated correspondence department is a drag on all other departments.

To organize your correspondence department economically and correctly, place it in charge of the chief correspondent under the office or business manager. The chief correspondent is in authority over six sub-department heads; incoming mail clerk; chief stenographer; head filing clerk; outgoing mail clerk; telephone operator, and information clerk. It does not matter what the size of the concern may be, all these classes of work must be maintained. They may not be individual sub-departments—in some houses one person may be in charge of several of the branches—but the division of work always holds (Figure XVI).

Incoming mail is handled by the incoming mail clerk, who sorts and divides it according to the departments. All letters addressed to individuals are sent direct to the addressee. All general correspondence is opened by the chief clerk or incoming mail clerk; letters of great importance go to the higher officials; letters requiring

individual attention are sent to the heads of the different departments; routine letters go to the regular correspondents. The course by which mail is distributed from the chief clerk's desk is shown in Figure XVII.

Although all letters referring to the activity of any department go direct to that department's head, he may have several sub-departments and send the correspondence to a subordinate to be answered.

WRITING *the letter neatly, promptly and correctly is important in every office—plans by which stenographic work is checked and costs determined.*

All mail of importance should come into the hands of the chief clerk for examination, before it is referred to the proper officials. He saves the heads of departments much labor by diverting unimportant matters and turning nonsensical communications into the waste basket. It is often a good plan for the chief clerk to keep a record of all important mail and note to what departments letters are sent; in this way he keeps his fingers on the pulse of the whole correspondence organization, and can tell exactly what kind of attention was given each letter. In some concerns when the mail is sent to the various departments, a record of all letters sent to that department accompanies the letters. At the close of the day the index is returned with the attention each communication received indicated upon the index. If any communication is not attended to, the chief clerk calls up to learn what disposition was given the matter.

The head stenographer is in direct charge of the stenographic force of the office. While certain officials or heads of departments may have private stenographers, a force of general stenographers, subject to calls from any department where service may be required prevents

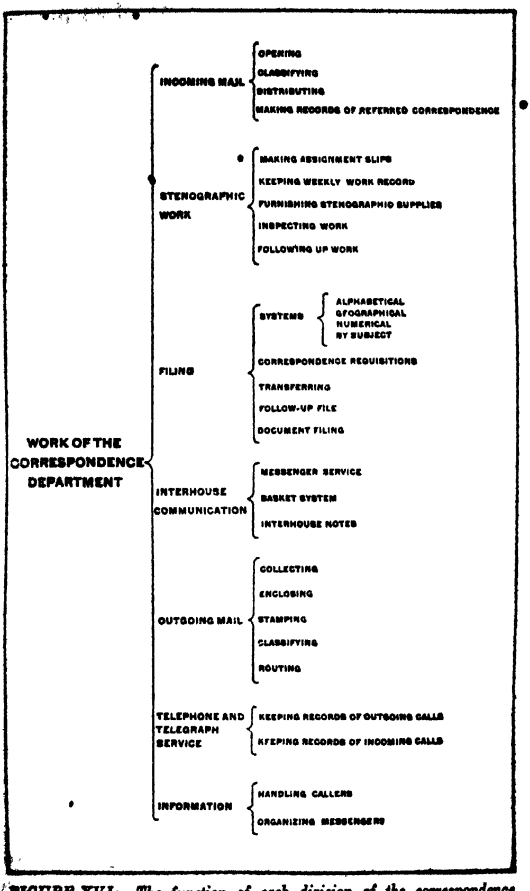


FIGURE XVI: The function of each division of the correspondence department is outlined in this chart, which shows the proper routine for incoming and outgoing mail and other communications

the time wasting and idleness which is generally the accompaniment of the individual stenographer system.

All stenographers are assembled in one room. When a call comes for a stenographer from an executive or correspondent, the head stenographer makes out a duplicate assignment slip (Form I), which is given to the stenographer sent. On this slip the stenographer enters the time of receiving dictation, of transcribing the letters, and the number of letters. When the assignment is completed the slip is returned to the head stenographer, who compares it with the copy she has kept and files it in the stenographer's folder. In this way the head stenographer keeps track of the work done by each individual.

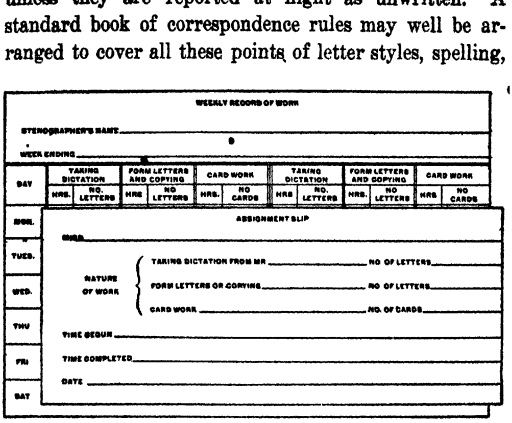
From these slips the amount of work done and time put in is transferred to the individual typist's weekly card (Form II). These cards may be made the basis of a system of computing the costs of stenographic work, as later described.

These record cards can be amplified to keep track of postage and supplies, such as paper, envelopes, follow-up sheets, carbons, books, pencils, and so on.

It is well also to have the chief stenographer see that all work done is accurate and neat. Men judge your business by what they see, and there is too much advertising value in a neatly written, correctly spelled letter to permit careless work. The work of every untested stenographer should be carefully inspected by the head stenographer before the letter is returned to its department to be signed.

Promptness in work is also a matter for the head stenographer. By referring to her copies of the assignment slips she checks work so that letters are not left over in the note books from one day to another

unless they are reported at night as unwritten. A standard book of correspondence rules may well be arranged to cover all these points of letter styles, spelling,


WEEKLY RECORD OF WORK

STENOGRAPHER'S NAME _____

WEEK ENDING _____

DAY	TAKING DICTATION		FORM LETTERS AND COPYING		CARD WORK		TAKING DICTATION		FORM LETTERS AND COPYING		CARD WORK	
	HRS.	NO. LETTERS	HRS	NO LETTERS	HRS.	NO CARDS	HRS	NO. LETTERS	HRS.	NO LETTERS	HRS	NO CARDS
MON.												
TUES.												
WED.												
THU												
FRI												
SAT												

ASSIGNMENT SLIP

MR. _____

NATURE OF WORK
- TAKING DICTATION FROM MR _____ NO OF LETTERS _____
- FORM LETTERS OR COPYING _____ NO. OF LETTERS _____
- CARD WORK _____ NO. OF CARDS _____

TIME BEGUN _____

TIME COMPLETED _____

DATE _____

FORM I (front card): The stenographer's assignment slip is made out in duplicate by the head stenographer for all work done. FORM II (back card): Her weekly record gives a classified statement of all kinds of work done each day

paragraphing, stationery and routine. It is also important that work be sent to its proper department in time for correction and signing; in many cases where it is a matter of great importance, it must pass through the correspondent's hands, then on to the chief clerk or a head executive for signing.

> IMPROPER *filing is sometimes the cause of aggravating delays and lost business—right methods bring to light instantly any letter which is wanted.*

When the letters have been typewritten and sent back for signature, the carbon copies go to the filing department. This department, upon which the smooth running of any business depends, is in charge of a head

filing clerk responsible for the condition of the files.

The principal duty of the head filing clerk is to see that all files are properly equipped, and that each subordinate is doing the work promptly and correctly. Filing letters in the wrong place soon renders the filing system inadequate and almost useless.

The complete correspondence in each department, when ready for filing, is gathered by a messenger, who brings all copies to the sorter, a box arrangement (Figure XVIII) indexed with guides similar to the regular file. This distributing device saves time and energy, eliminating the necessity of going from file to file. Correspondence should pass into the regular file as quickly as possible, so that if a letter is wanted the next day after it is written, it can be found under its proper guide.

The simplest system is that which files solely by alphabetical arrangement. If the business is small, this plan will be found sufficient. Each letter of the alphabet is divided and subdivided as far as desired. The "A" folders, for example, may be indexed "AB," "AD," "AG," and so on. Under "AB" would be filed correspondence, say, of Abbot Brothers Company, together with the duplicate copies of outgoing letters to that firm. Under "AD" would go letters to and from John Adams. A transfer cabinet, similar in idea but containing larger compartments, is used periodically to relieve the current files.

When the correspondence of a firm is very extensive, and the daily volume of matter to be filed is large and comes under many headings, a combination of geographical and alphabetical systems will be found most suitable. The file is subdivided by guides printed for states, and the correspondence of each state is arranged alphabetically. There are fifty states and territories in

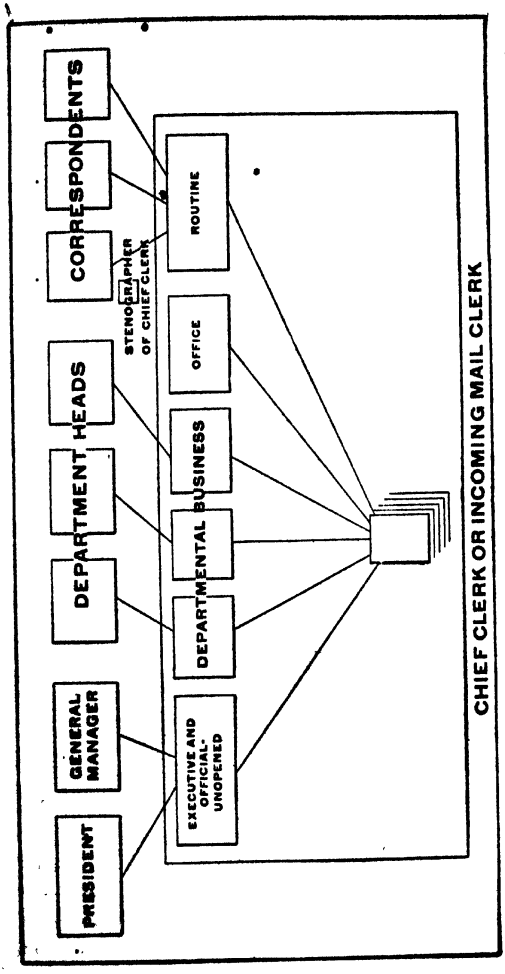


FIGURE XVII: The chief clerk is generally in charge of distributing incoming mail. This chart shows how letters travel from his desk to the various executives, correspondents and department heads

the United States. The value of this system, therefore, is evident. A dozen filing clerks can work together without mutual hindrance. When you wish to locate correspondence, moreover, the system has at once eliminated forty-nine out of the fifty possible places where it would be necessary to search.

In the numerical filing system, each correspondent has his individual number, which always identifies him. This requires a card cross-index arranged alphabetically. Where business requirements call for reference to subjects treated in the letter rather than to the name of the correspondent, numerical filing is sometimes satisfactory.

Your own business requirements will teach you what peculiar adaptations of these plans to make. You can have miscellaneous folders for infrequent correspondence or special folders in varying colors to signify particular classes of letters. The color scheme can also be extended to include metal clips or guides on the index cards or in filing drawers, so that the clerks will be able to locate what they want with a minimum of time.

The filing should be so divided that each clerk will have certain definite files in his charge and will be responsible for their condition. This centers responsibility and avoids confusion in filing. Such a rule requires also that no one be permitted to take a letter from the file except the clerk in charge. When you wish correspondence from the files a correspondence requisition (Form III) giving the name of the correspondent, date and subject, and handed to the head filing clerk gives notice to the clerk in charge. This requisition is then filed in the place from which the letter is taken, and returned to the department head signing it only when the correspondence requested is turned back. At intervals papers long outstanding should be called in.

All correspondence is transferred once or twice a year. In the alphabetical files, new folders may be provided on the first of January of each year, and all correspondence for the current year filed in the new folder. The old folders are to remain in the case until July 1. On this date all correspondence of the previous year is put in transfer cases or other convenient files. This plan leaves at least six months' correspondence in the files at all times for reference.

The numerical transfer is effected in a similar manner; new folders are to be provided on the first of January for the correspondence of the coming year, and

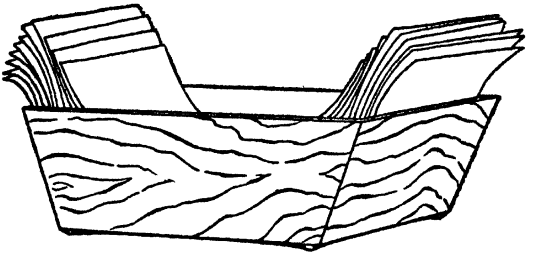


FIGURE XVIII: The "sorter" is a convenient box in which correspondence is placed temporarily and classified. It has divisions corresponding to those in the general files

each new folder is inserted directly after the folder of the same number, in which the correspondence of the previous year is allowed to remain. The current year is at the same time stamped on the index card. These folders bearing the same number are left until July 1, when the correspondence of the last year is removed.

When a letter is written which may require further attention, have two carbon copies made; the first

carbon goes to the permanent file, while the second, made out in the form of a tickler sheet (Form IV) with the follow-up date indicated, is filed ahead to that date in the tickler file.

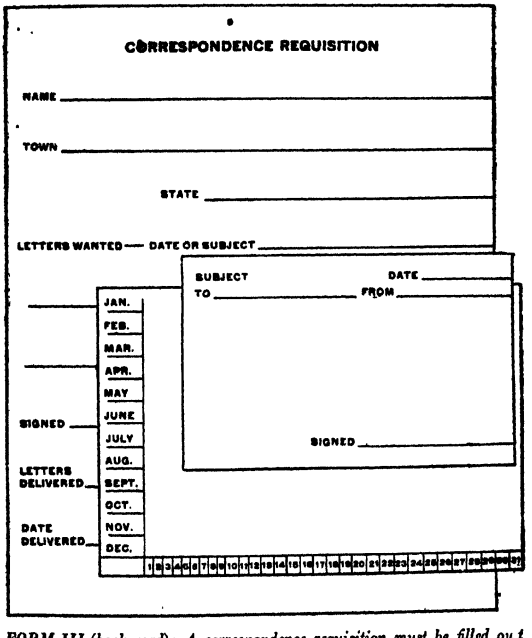
All the follow-up sheets are best kept together in one date file in the filing department. Each day the clerk in charge takes out all letters filed to that date, and investigates the correspondence concerning each to see what developments have taken place. If a sale has been made, or the letter has accomplished its purpose, nothing is done with it. But if it has remained unanswered, it is sent to the department for attention.

Besides this method of follow-up, a holdover file is well maintained on each correspondent's desk to take care of all important matters on which the correspondent may be working, important business with which he wishes to keep in touch or which is not ready for the completed file.

Contracts, leases and all valuable papers belong in the office safe. A letter file in the safe answers very well for this purpose in the ordinary business house. But where the concern conducts its business on a contract basis or by special agreements, these valuable papers need to be filed alphabetically in a special safe arranged for that purpose, or to a special file in the office vault which is to be found in all modern office buildings. Copies of orders, where they run into large amounts of money, are filed with valuable papers.

Ordinary papers, invoices and statements which have been given attention and are not required in the accounting department are to be filed in the regular correspondence files, either under the name of the concern from which they were received, or under their subjects.

The most complete and satisfactory method of interhouse messenger service provides that a messenger shall visit each desk every half hour or oftener to collect and distribute all mail and papers, and gather the


CORRESPONDENCE REQUISITION

NAME

TOWN

STATE

LETTERS WANTED — DATE OR SUBJECT

SUBJECT DATE

TO FROM

SIGNED

SIGNED

LETTERS DELIVERED

DATE DELIVERED

JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.

FORM III (back card): A correspondence requisition must be filled out by any person needing papers from the file. FORM IV (second card): Tickler sheet. FORM V (front card): Interhouse correspondence blank

matter for filing. Three baskets mounted one above the other appear on every correspondent's or department head's desk. The top basket is used for incoming com-

munications of all kinds. The second basket contains documents for the messenger and outgoing correspondence, and the bottom basket is for matter complete for filing. By this method all correspondence is kept moving in the proper channels without delay.

Interhouse correspondence by telephone is not always satisfactory where important communications take place between the various departments of a house. Where specific directions are to be sent to any department in the house, have the communication dictated to a stenographer, who writes it on a note blank, filling in the subject and the names of the persons addressed and the writer, as provided by Form V. When the note is ready, it is signed with the initials of the writer and placed in the messenger basket. By this method orders are not forgotten and mistakes are located.

All matter of business importance should be put in writing. The written order puts the employee and department manager "on record;" a detailed account of every transaction between the employees of the house may be had by consulting the files. A system of this nature prevents the slips or inaccuracies of memory, a loss of trade and money as well as the disorganization of the office.

The outgoing mail clerk looks after the gathering, enclosing, stamping and mailing of correspondence. When the correspondence has been collected from all departments, it is sorted in the mailing room, and when there are several letters to an individual, branch house, agency or firm, they are all enclosed in one envelope, thereby saving postage.

Where the various departments stamp the envelopes a record is kept by the cashier of the amount of postage given out. As this mail comes from the different depart-

ments the outgoing mail clerk checks up and charges each department with the amount of postage used. Daily checking prevents a possible leak in the postage account. A balance is struck at the end of every month.

The outgoing mail clerk needs to be familiar with the schedules of all mail trains. In cases where the outgoing mail reaches large volume dispatch results from keeping the letters assorted according to the geographi-

OUTGOING PAID MESSAGES

WEEK ENDING _____

DATE	FROM	TO	CHARGE

INCOMING COLLECT MESSAGES

WEEK ENDING _____

DATE	TO	FROM	CHARGE

FORM VI (back card): Card on which telephone girl keeps all outgoing paid messages. FORM VII (front card): Incoming collect messages are recorded on this card

cal mailing lists and further according to trains. Post-office authorities are always willing to furnish information along these lines.

The telephone operator has charge of the telephone exchange and looks after all telegrams and telephone

messages. She keeps a record of all long-distance calls and especially of the calls coming from the various departments of the house; and also of all outgoing paid messages (Form VI) and incoming collect messages (Form VII).

Arrange also for an information clerk who will keep posted on the working of the whole office and the personnel of the firm. It is his duty to meet visitors tactfully; to learn what they want and refer them to the proper individual. In many instances the offices of telephone operator and information clerk are combined. All outgoing messenger boys are in charge of the information clerk.

Only by careful choice of employees for these six essentials of office routine can you put at the disposal of your executives the most efficient working machinery. Your success depends upon simple rules, understood and firmly enforced.

RECORDS *kept in a haphazard way, or not kept at all, don't mean "less office expense"; they mean chances missed, sales lost, efforts wasted.*

—G. R. Clayton

XVII

GETTING OUT THE MAIL

By Edward Mott Woolley

EXCEPT where tasks have been set or piece rates fixed for certain repeat operations, such as entering orders, typing addresses, and folding and inserting circular letters, the day's work in the office has varied as widely as the individual worker and the factors influencing him. Expert employees of every class, by reason of their competence, have had to shoulder double burdens. Higher wages have recompensed them; the less skillful have "had an easy time." The business has been the chief sufferer—paying premiums for work which, with proper organization, the slower clerks could have accomplished; enduring delays that affected customers and other vital interests while the overloaded experts were "catching up" or recuperating from overtime; carrying superfluous half-workers because there was no clear understanding of *how much was to be done, how much one clerk or stenographer could do and,* therefore, *how many employees were needed.* Yet these points are subject to the accurate appraisal that comes of time-study and expert planning.

The one office activity which touches every business, great or small, is the handling of correspondence—the everyday task of getting out the mail on time and in the best possible shape.

Firms without number boast of their policy of an swering letters on the day of their receipt. Investigat these and you will find that their correspondence i nearly always routine and does not need sales effor or personal attention. For the great majority o houses, however, there are dozens or even hundreds o letters daily which ordinary form-fed correspondent cannot dictate, but which require the attention of execu tives saddled with many other functions.

RE-ORGANIZATION *of an office showed startling wastes in the conduct of the stenographic force—what time-studies and revised schedules accomplished.*

A large eastern company determined to re-organize its office along efficiency lines. The complaints of employees, the obvious effect which delays were having on customers and allied outside interests, the occasional breakdown of over-driven stenographers and the increasing volume of correspondence forced the decision to employ an "efficiency engineer." Though not the first activity on which he turned his microscope, the handling of the company's correspondence was the function which showed the most serious time-wastes and money losses.

The conditions he found, it is safe to say, exist to some extent in every business large enough to be departmentized. Only a few minor executives had a fixed hour for dictation; the others consulted their own convenience exclusively, even to the length of postponing dictation until late in the afternoon and continuing it long past the five-thirty closing hour. Frequently a stenographer quitting at six-thirty, after two or three hours "taking" would have notes for twenty-five or thirty letters in her book which could not be transcribed until the morrow. Sometimes after an absence from the city an executive

would have as many as fifty letters to dictate in a single day. If after one of these ordeals, a stenographer failed to report next morning, the congestion became more acute and the effect on waiting customers more exasperating.

Hiring extra girls to provide for these emergencies helped but little. Advanced wages did not insure the experts against occasional collapse. The situation called for an increase in efficiency for the less skillful, and a plan of distributing work so as to allow the finishing and dispatch of each day's letters before closing time.

Analysis and time-study of every operation bearing on the handling of corespondence was the main undertaking. To discover or develop the best method of writing a letter, to determine the minimum time which should be allowed for it and the rest period necessary to avoid strain and fatigue, you must have exact knowledge of a dozen unit operations contributing to it. The best way of inserting the letter-sheet, for instance, the time it takes, the unnecessary motions indulged in by most typists, were simple detail problems; but it required repeated stop-watch studies of a dozen of the deftest stenographers before a standard for the use of all was established.

One after the other, the unit operations were timed and the straight-line method of performing each wrought out. The swiftest, easiest way of locating the date line, for example, the shortest way of finding the first address line, the matter of margins, the line-lengths, the spacing, were all subjects of careful investigation and experiment before the standard for each was determined. To expedite the typing, the style of the company's letters was changed. The indenting of paragraphs was discontinued (an extra line space serving to mark the transition) to

spare the operator the troublesome shifting of the carriage.

For time-study purposes, letters were resolved into their unit elements—date, address, salutation, message and superscription, and the minimum time allowed for writing each unit fixed. When the investigation and standardization were finished, the company not only had evolved the easiest form of letter to write, but it knew also just how many minutes and seconds a competent stenographer should take to turn out a seven- or ten-line letter or one covering two pages. Knowing also the daily maximum number of letters written it was easy to figure how many girls were needed to get them out.

REGULAR *dictation hours massed in the early part of the day, and the relay handling of stenographers resulted in dividing the work more equitably.*

The investigator began by establishing hours for dictation. Before, there had been no pretense of observing either. Executives summoned and dismissed stenographers whenever it suited them, devoting half of one morning to dictation and shifting, next day, to late afternoon. The basic theory was sound, of course, that the time of a boss is of greater value than that of a clerk. As in many other offices, however, the theory had run to seed and the whim of the head ruled frequently instead of the necessities of the department.

In framing his preliminary schedule of dictation hours, the investigator deferred, as much as possible, to the wishes and habits of executives. Several had private secretaries and made requisitions on the general stenographic force only when the secretaries were loaded up. Others dictated virtually all their outside letter and house notes and reports to general stenographers. The

chief trouble had been that, after calling in a shorthand writer the dictation was continued until the grist of letters or reports was done—a process lasting at times three or four hours and leaving the girl too exhausted to transcribe her notes even when time remained before closing.

With a table of executives' preferences in the matter of hours and stenographers before him, the efficiency engineer arranged a dictation schedule which the various heads accepted, though not a few grumbled later when they found they were expected to observe it. The bulk of the correspondence work was concentrated in the forenoon while the afternoon dictation, except for urgent letters or telegrams, had to be finished by four o'clock, routine matters going over till next morning. This left ninety minutes to the stenographer to clear up her final "takes" and get the letters into the last outgoing mail.

To guard against the overloading of individuals, a head stenographer was placed in charge. Her duty was to supply stenographers according to the schedule, consulting each head's preference as far as possible, and supplying reliefs whenever any single dictation went beyond the established bounds. At or around four o'clock, for example, these limits meant as many pages of notes as could be transcribed in the eighty or ninety minutes remaining of the day. Exceptions were made, of course, where reports were in preparation and a break would be inadvisable.

On straight correspondence, eight or ten pages of notes would be the average "take" if a relief was available. When a stenographer was held beyond four o'clock, she reported the circumstance. If the delay kept her from transcribing all her notes before five-thirty she filled

out a blank stating how many letters were left over.

This relay plan of handling stenographers was adopted as a permanent system, despite the objections of executives who missed the free-and-easy method formerly in vogue. In many offices the relay system might prove awkward or entirely unsuitable. It contains, however, the germ of an idea which might be adapted either to a small office where two stenographers are employed to do what one might readily accomplish, or to the large organization where the general stenographers are competent to handle the correspondence of nearly all departments.

> STUDY *of machines and the work of individuals revealed wastes and led to a standard "one best way" for every operation.*

With his temporary dictation schedule in force, the investigator turned to analysis and time-study of the things which affected speed and accuracy in individuals. How many times a typewriter key should be struck in a minute was a basic problem; before it was solved and a standard determined, not only had a dozen operators been studied with a stop-watch, and their personal methods and motions noted; but the inquiry had also taken into consideration the action of different makes of machines, their condition, adjustment and repair as affecting output, the placing and lighting of desks, their height and design, and the height and character of the chair. These physical factors were standardized before the ultimate standard for the number of strokes per minute was decided upon. The aim was to find the easiest way, to eliminate interruptions and hindrances, but at the same time to avoid undue physical and nervous strain and allow rest periods.

With a stenographer of average capacity, speed in shorthand work is governed by the speed of dictation. The transcription of notes is a process which can be standardized, however. In this case it was learned that an operator, working at the efficiency required, would need half an hour, or an hour to write a certain number of notebook pages. Thus, if she began at four o'clock with a given number of pages to transcribe, and was protected from interruptions, it was certain that her letters would go to the sealing clerk at a certain desired hour. If she failed, the cause clearly was low efficiency.

To supply the necessary incentive, a bonus of ten per cent of her salary was paid to every girl who completed her day's work before five-twenty and had her letters in the mailing department. This did not mean that she had worked all day at the maximum normal speed. A stenographer's work cannot be gauged as precisely as that of a machinist, who repeats over and over a series of motions until it is finished and then begins immediately upon another series. In fact, it was not the purpose to crowd stenographers all day, but in the afternoon the work was almost continuous, and the bonus was meant to encourage efficiency during this crowded period. Finishing her day's work within the prescribed time, a stenographer filled out a blank, "I completed my letters today at 5:20 p. m.," and handed it to the chief stenographer. If she failed to finish the work, the slip read: "I was unable to finish my letters until 6:20 p. m. The reason was that Mr. Lawrence did not finish dictation until 5:10 p. m."

If the reason was due to some hindrance not her own fault, she was allowed the bonus. The bonus considerably reduced absences. Stenographers were paid for moderate periods of absence, but the bonus was lost.

The stricter the adherence to the dictation schedule, the more frequent was the successful accomplishment of the tasks. The greatest single trouble experienced was the difficulty in inducing executives to cooperate in this direction. The habit was gradually formed, however, and the results in reduced office expense were so marked that a violation of the rule without good cause was inexcusable waste. Executives soon came voluntarily to prefer the new method. Eventually, it was found that stenographers working at the prescribed normal efficiency, could accomplish nearly fifty per cent more than the former average output.

The increase in efficiency was due largely to improvement in conditions surrounding the work, rather than to increased speed of operation. Interruptions were guarded against and matter to be dictated was collated in advance.

Letters and other papers were arranged in compact form, and checked off as the dictation proceeded. If for any reason a letter was not answered at its scheduled time, it was put in a "delayed correspondence" basket. If necessary to send it to some other executive, a memorandum blank was required to be substituted. Every day this basket of delayed correspondence was gone through. Rubber bands over the baskets prevented matter from being lost.

Though thirty or more stenographers were employed, no attempt had been made to group them according to their work. Correspondence girls were intermingled with others who did card or advertising work.

Furthermore, the less capable stenographers were called on at times to do letter work, and frequently the inferior classes of stenographic duty fell to better workers. This policy was changed so that the most skillful

operators were kept on the highest class of duty. The correspondence stenographers were grouped by themselves.

The early time-studies showed large time-wastes due to conversation. Another large loss came from unnecessary steps. Girls were constantly traversing the entire office, some of them having to make long detours around articles of furniture, railings, and other obstructions. Gates hindered their progress at several points. Two of the girls, taking dictation from the higher officials, made as many as forty or fifty trips of this sort a day.

STANDARDIZATION *extended to apparent trifles, such as the proper way to insert paper in the typewriter, and resulted in the long run in big savings.*

To remedy conditions by minimizing conversation and eliminating unnecessary travel, the correspondence stenographers were brought to a central location and grouped along both sides of the center aisles. The subgroups were arranged so as to separate operators by five-foot screens, reducing noise and interruptions and making conversation impossible without leaving the desk. The offices of several executives were also centralized. A buzzer call-system connecting these with the head stenographer's desk was installed.

The old plan of lighting—a hit-or-miss scheme of overhead swinging lamps, with some desk lights—was abolished. The new system used lights attached to movable arms allowing direct illumination to the machine or the desk, as desired. Indirectly, the new system reduced eye troubles and nervous strain.

Typewriters also were standardized. Half a dozen makes had been in use, some admittedly inferior. The make proved the best by test was adopted for general

use. A capable man was put in charge of the mechanical care of the machines and stenographers were relieved from the daily task of cleaning, oiling, changing ribbons and so on. These latter operations were performed by boys who arrived at eight o'clock in the morning.

The adoption of a standard chair effected a considerable time-saving. One stenographer had long used a swivel chair with a worn screw. The seat slipped down continually and had to be screwed up perhaps forty times a day.

In this office a large number of technical terms were used, and new stenographers ordinarily required a long time to familiarize themselves with these words. Half a dozen trips to the dictionary were not unusual in writing a single letter, and executives lost time during dictation by the necessity for explaining terms and spelling out words. This trouble was minimized by the use of a sheet containing in alphabetical order all the technical words in common use. One of the first duties of a new stenographer was to learn how to spell and pronounce these technical terms. When an executive dictated to a stenographer unfamiliar with these terms he did not have to waste his time to stop and spell out words, at the same time interrupting the train of his thoughts; he simply referred her to this sheet.

TRAIN *yourself to like your business, to concentrate yourself upon it, and success will follow as naturally as crops follow seeding.*

—Edward P. Hatch
President, Lord & Taylor

XVIII

CORRECT ROUTINE FOR THE SALES ORDER

By William E. Wilson
Consulting Accountant

HANDLING a sales order after it has come into the house from the sales department and aside from the financial routine of sales accounting, is simply a matter of office routine.

With the opening of the mail, all orders received from salesmen or direct from customers are placed together and the first process is to enter them on a sales register. This register is purely to protect against the loss of the original and in order to have a basis for checking back. This registration includes merely the entry of the name of the customer, the amount of the order, and the date of its receipt. The orders are entered on the register sheet consecutively, one on each line. Every line is numbered in series and the same number is placed on the order.

From here they go direct to the order department, where they first pass under the eye of either the manager of the department or his assistants for "interpretation." The entry clerks who will next receive the orders are supposed to do only the mechanical work of entering. First, however, you need some responsible person to interpret the order, and by a system of underlining or key figures, to show what it means, so that the entry clerk need not read the entire letter.

Mechanical development in entry work calls for the making out of all records pertaining to the order at one writing.

Six classes of copies are required in the usual routine of business: first, the office copy of an order, which forms the permanent record (Form I); second, the copy which is to go to the factory, warehouse or shipping room (Form II) as instruction for gathering the articles; third, the acknowledgment of the order, to be sent to the customer (Form III); fourth, the label to be sent to the shipping room to be pasted on the package as shipping direction (Form IV); fifth, a copy for the files of the sales department (Form V); sixth, the invoice (Form VI).

According to the routine of the business, other copies may be added. Those named are simply the basic copies required in every business. In some offices, a copy is made for the advertising department; two or even three copies are often made for the shipping room to be signed as receipts by the transportation companies; charge sheets to be sent to the accounting department, from which it makes its entries (Form VII); an additional copy of the invoice to be used as the ledger record in the accounting department.

The two sets of invoices and charge sheets are placed in a suspense order file where they remain until the goods have been shipped to the customer. The original office copy is sent to the correct department for approval. When it is returned approved, the various department sheets are forwarded to the respective departments. By this plan all departments may be employed simultaneously in filling the order.

Copies may also be made for the collection follow-up system. One may be a statement, another a notice

to the customer of a sight draft about to be made, and a third, a sight draft. These three forms are then fastened together and filed chronologically in the tickler. On the day they turn up in the date file, a statement is mailed to the customer. The draft and the notice are refiled to the next date, and so on till sent.

The acknowledgment copy is immediately sent to the customer; a copy is sent to the plant, warehouse or storeroom or one copy to each department if the order

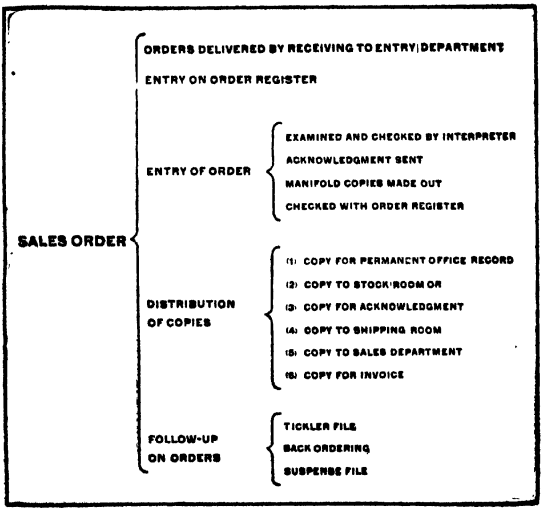


FIGURE XIX: Sales orders follow a definite routine as soon as they reach the house. This chart shows the method by which each order is processed to insure proper shipment

calls for goods from different departments and from this the goods are gathered, checked by the order and sent from the plant, the warehouse or the different depart-

ments to the shipping room, accompanied by the orders. In the meantime a copy of the complete order is sent to the shipping department, by which the goods will finally be checked and made ready for shipment.

OFFICE COPY

THEIR NO. _____
OUR NO. _____
REGISTER NO. _____
CREDIT _____
O. K. BY _____

CUSTOMER _____
ADDRESS _____

QUANTITY ORDERED	CHECK OR CORRECTION	DESCRIPTION	PRICE	EXTENSION

DEPARTMENT ORDER
STOCK ROOM COPY

ORDER NO. _____
GOT OUT BY _____
CHECKED BY _____

CUSTOMER _____
ADDRESS _____

QUANTITY WANTED	QUANTITY GOT OUT	ARTICLES	PRICE	MEMO

ACKNOWLEDGMENT OF ORDER

YOUR NO. _____
OUR NO. _____
REGISTER NO. _____

TO _____

WE ACKNOWLEDGE RECEIPT OF YOUR ORDER FOR

QUANTITY ORDERED	QUANTITY	DESCRIPTION	PRICE	EXTENSION	TOTAL

SHIPPING INSTRUCTIONS

TO _____
TOWN _____
STATE _____
VIA _____

FORM I (top card): The first copy of an order is held as the office record. FORM II (second card): Departmental copy. FORM III (third card): Acknowledgment of order. FORM IV (bottom card): Shipping label

The copy which serves as the label is placed on the package and it is then sent out to the customer. If the copies include shipping receipts, these have gone to the

UNIFORM BILL OF LADING — STANDARD FORM STRAIGHT BILL OF LADING APPROVED BY THE INTERSTATE COMMERCE COMMISSION BY ORDER NO. 727 OF JUNE 27, 1906

_____ RAILROAD COMPANY

SHIPPER'S NO. _____

STRAIGHT BILL OF LADING—ORIGINAL—NOT NEGOTIABLE

NO. 1

AGENT'S NO. _____

RECEIVED, SUBJECT TO THE CLASSIFICATIONS AND TARIFFS IN EFFECT ON THE DATE OF ISSUE OF THIS ORIGINAL BILL OF LADING, AT

_____ 191 FROM _____

THE PROPERTY DESCRIBED BELOW, IN APPARENT GOOD ORDER, EXCEPT AS NOTED (CONTENTS AND CONDITION OF CONTENTS OF PACKAGES UNKNOWN), MARKED, CONSIGNED AND DESTINED AS INDICATED

THE RATE OF FREIGHT FROM _____ TO _____ IS IN CENTS PER 100 LBS.

IF ___ TIMES 1ST	IF 1ST CLASS	IF 2D CLASS	IF RULE 25	IF 3D CLASS	IF RULE 26	IF RULE 28	IF 4TH CLASS	IF 5TH CLASS	IF 6TH CLASS	IF SPECIAL PER _____	IF SPECIAL PER _____

(MAIL ADDRESS—NOT FOR PURPOSES OF DELIVERY)

CONSIGNED TO _____

DESTINATION _____ STATE OF _____ COUNTY OF _____

ROUTE _____ CAR INITIAL _____ CAR NO. _____

NO. PACKAGES	DESCRIPTION OF ARTICLES AND SPECIAL MARKS	WEIGHT (SUBJECT TO CORRECTION)	CLASS OR RATE	CHECK COLUMN

IF CHARGES ARE TO BE PREPAID WRITE OR STAMP HERE, "TO BE PREPAID"

RECEIVED $ _____ TO APPLY IN PREPAYMENT OF THE CHARGES ON THE PROPERTY DESCRIBED HEREON

_____ AGENT OR CASHIER

PER _____ (THE SIGNATURE HERE ACKNOWLEDGES ONLY THE AMOUNT PREPAID)

CHARGES ADVANCED $ _____

_____ SHIPPERS

PER _____

_____ AGENT

PER _____

(THIS BILL OF LADING IS TO BE SIGNED BY THE SHIPPER AND AGENT OF THE CARRIER ISSUING SAME.)

FORM VIII: Uniform bill of lading approved by the Interstate Commerce Commission

shipping room with the first copy and label, so that the proper receipts are taken from the transportation company. All the copies are then sent back to the office. One copy is now sent to the sales department to go into

SALES DEPARTMENT COPY

ORD'R NO. _____

CUSTOMER _____

ADDRESS _____

GOT OUT BY _____

CHECKED BY _____

QUANTITY WANTED	QUANTITY GOT OUT	ARTICLES	PRICE	MEMO

INVOICE

DATE OF INVOICE _____ 19____ DATE OF ORDER _____ 19____

SOLD TO _____ YOUR NO _____

TOWN _____ OUR NO. _____

STATE _____ INVOICE NO _____

VIA _____ TERMS _____

CAR NO. _____

QUANTITY ORDERED	QUANTITY	DESCRIPTION	PRICE	EXTENSION	TOTAL

CHARGE RECORD

LEDGER

	REFERENCE	CREDITS	BALANCE
CUSTOMER _____	$ _____	$ _____	$ _____
ADDRESS _____	$ _____	$ _____	$ _____
	$ _____	$ _____	$ _____
	$ _____	$ _____	$ _____

QUANTITY ORDERED	QUANTITY SHIPPED	DESCRIPTION	PRICE	EXTENSION	TOTAL

FORM V (top card): Copy filed by the sales department. FORM VI (second card): The invoice sent to the purchaser. FORM VII (bottom card): Copy sent to accounting department as a charge record

its records, one copy is kept in the office and filed with the permanent correspondence on the sale.

One copy has also been held in the order department

awaiting the shipping report. Against this the shipping copy or report is now checked to be sure that all goods have been shipped. After all the goods have been shipped, the copy which serves as the bill and which has been held in the order department is sent with the office copy into the accounting department.

A further duty of the order department is to follow up orders to see that they are shipped on time, and correctly. In a business where prompt shipment is essential, a date is usually specified on the order. In that case, the copy which is held in the order department is put into a tickler file under the date on which shipment is to take place or when the shipping copy is supposed to come back with the information that the goods ordered have been sent out. Every morning these copies are taken out for follow-up.

When shipment is made, three copies of the shipping receipt or bill of lading are drawn up by the shipper and the agent of the railroad company. The original receipt (Form VIII) is retained as a sales record. The bill of lading is described at further length in the next chapter.

THERE is probably no other single word in the language that better describes success than "system." The larger the business, the better must be the system by which it is conducted; yet whatever its size, system is the essential factor.

—Leon Mandel
Mandel Brothers

XIX

KEEPING RECORD OF GOODS RECEIVED AND SHIPPED

By Charles E. Cake

THE traffic department not only has charge of the delivery of any product to customers, but it also concerns itself with in-freight shipments coming to the production division of the business. Various causes have contributed to the present importance of the traffic department in business enterprises, the most prominent of which are: first, the interstate commerce legislation, which places upon all merchants and manufacturers the burden of ascertaining for themselves the proper rates for transporting freight; second, the tendency of all business to extend the limits of their selling fields, and the consequent need of equalizing the difference in freight charges between these and more favorably situated shipping centers.

It is the function of the traffic man to look after the routing of freight when routing is necessary to insure a low rate. He defines the manner in which goods shall be packed, and frequently upon this is determined the rate which shall be applied. It is his business to see that shipments are promptly delivered and to trace them when they are delayed; to check the freight expense and to handle claims effectively at low costs. Many of the claims which are presented are sidetracked and lost. The man who does not adopt a system in the handling

of his claims and other details which belong to the traffic department is sure to lose money. Shipments which have been lost or miscarried, unless traced and returned to the shipper or delivered to the consignee will be sold at some point for charge.

ORGANIZATION *of the traffic department on correct lines requires record-keeping on every item received and sent, with the giving and taking of receipts.*

The information which the traffic manager must put on record includes the freight classification of his line of goods to different territories; the rates from his own and competitive shipping points to destination; the switching rates; the routing of shipments; the tracing of shipments; the filing of claims; the record of claims; the record of freight charges; the payment of freight charges, and the filing of tariffs.

The organization has two parts: the in-freight division and the out-freight division. The system of the department must be thorough, covering every detail; if it is not, the organization fails in its duty as guardian.

The traffic department's connection with in-freight begins the moment the purchasing department places an order, when notice is sent telling the name of the house from which goods have been purchased and date expected.

If the goods fail to arrive promptly, an "overdue" freight notice is sent to the railroad by the traffic department. If the shipment is not forthcoming, the claim department goes through the same procedure as in case of an out-freight loss, which is described later.

When the freight arrives, the railroad mails the usual "freight notice" direct to the traffic department. This is the first information the house has that its expected

freight has arrived. The traffic department enters this notice in its record of freight notices and expense bills. After the notice has been copied, an order blank (Form

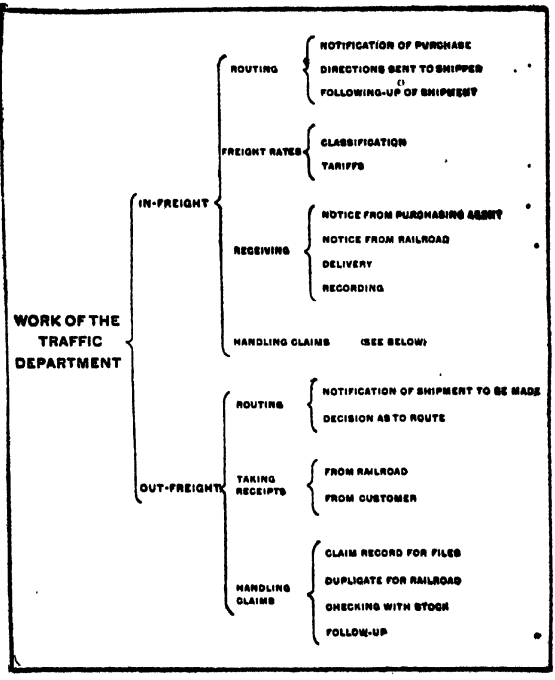


FIGURE XX: The traffic department is an important part of the office and the proper routine of its work, illustrated in this chart, is essential to the prompt delivery and the satisfactory receiving of goods

I) is filled out, serving primarily as a notice to the railroad company that the house desires freight as per notice. The teamster presents this at the proper door of

R.R.

RECORD OF GOODS RECEIVED MONTH OF _____ 191____

DATE REC'D	FROM	ARTICLES	WGT.	FRT.	TEAM

MR. _____ AGENT _____ RY.

PLEASE DELIVER TO OUR WAGON.

_____

_____

_____

_____

_____

_____

WE WILL MAIL CHECK FOR FREIGHT CHARGES, KELLY, MAUS & CO.

DATED _____ PER _____

FORM I (front card): This is the order given to the railroad when the delivery of freight is desired. FORM II (back card): This sheet records each item of freight received

the freight house, where he receives the goods called for.

Good management requires that the teamster never go to the freight house with an empty wagon. When he is to bring goods for any department, the traffic department inquires of that department whether it has any out-shipment; the manager of that department looks over his out-shipments and delivers to the teamster any goods he may have to ship. The traffic department "back freights," in other words, reducing the delivery expense about one-half.

The teamster, having picked up the articles enumerated in the freight notice, takes from the railroad company the "expense bill," which is in every part a duplicate of the freight notice, and reports back to his house and delivers the goods to the department for which the articles are intended.

The manager of this department then checks on the expense bill the goods intended for him. The other departments for which there may be articles in the shipment do likewise, until the full list has been checked. Then the teamster reports the expense bill back to the traffic department. Upon comparison with the freight notice the traffic department knows that the shipment has been received in its entirety. If there is a shortage or breakage, the traffic department proceeds under the rules for "claims and damages."

As in-freight is received and checked in the storeroom it is entered on a freight record (Form II) in the traffic department. This shows every bill of goods for which there must appear in the "freight notices" file a corresponding account. The two must be alike in the number of articles, the weight, the freight and the team. The keeping of the original freight notice further serves as a check on the railroad.

The standard form of bill of lading in use by the railroads throughout the United States is one approved by the Interstate Commerce Commission. There are two forms. One is known as the straight bill of lading and is not negotiable. The other is an order bill of lading and is negotiable. Both forms consist of three parts, which are, in fact, shipping receipts. The sheets differ only in name and signature. The top sheet, known as the original copy, is kept by the shipper as a receipt from the railroad. It is signed by the shipper and the agent for the railroad. The second sheet is the shipping order, and is signed only by the shipper and is held by the railroad as its receipt. The third sheet is a memorandum, signed by the shipper and agent, and intended to be sent to the customer, or kept by the shipper.

Standard bills of lading may vary in size, and may contain printing matter in addition to that prescribed by the Interstate Commerce Commission, but there must not be any conflict of statement.

All railroads provide forms of the approved bill of lading for the use of their shippers. Instead of using these, however, many shippers print their own bills in standard form in a size that conforms to their permanent office records and suitable for filing.

Original receipts are filed under date, each month kept separately; and if a receipt is taken from the files for any purpose, an exact copy is put in its place, marked "duplicate." When a shipper retains the memorandum, it is filed with the original, and serves as a "duplicate." A purchaser receiving the memorandum sheet in addition to the usual invoice, can save the work of preparing a teamster's list of the articles shipped by attaching the sheet to the delivery order given him when he is sent to the freight house.

The record for all freight paid is arranged so that each road's freight is kept separately. This puts the house in a position to know what business each road gets and what service it gives; also furnishing the simplest plan for locating the amount of freight paid on a particular shipment. Again, the original freight notice, the record of freight received and the record of freight paid must conform.

CLAIM FOR _____

_____ R. R. CO.

DR. TO KELLY, MAUS & CO. INC.
CHICAGO

OUR NO. _____
YOUR NO. _____

DATE OF CLAIM _____ 19____

ON SHIPMENT	WGT CH'GD RATE	AMT. PAID $	AMT. OF CLAIM	AMT. PAID	DATE PAID
FROM	WGT. SHOULD BE RATE	AMT. SHOULD BE $			
TO	WHEN PAID CREDIT				
BILL LADING DATED					
CONSIGNOR					
CONSIGNEE	SUNDRY LOSSES				
PACK. NO W.C NO					
DATE					
CAR NO					
COVERED BY					
EXPENSE BILL NO					
DATE					
PAPERS TO	REMARKS				
	KELLY, MAUS & CO				
	BY				

FORM III: A claim record is filled out when a shortage in freight occurs. It is filed with the railroad company instead of the original freight receipt

The traffic department pays freight bills weekly. The expense bill has been found correct from checking with the freight notice. The traffic department has then only to make out its "cashier's voucher" and the amount is forwarded to the railroad company.

The connection of the traffic department with outfreight shipments from the house to its customers comes after the sales order has gone through all the other departments; after it has been recorded by the entry clerk, and approved by the price man and credit manager.

Thus approved, the order comes to the traffic department. The shipping clerk of this department immediately routes and checks the order. It is then sent to the department having the articles called for, a separate order for the shipping clerk accompanying it.

Many shippers make a practice of printing on the three sheets of the bill of lading a complete list of all the articles freighted at any time by the shipper. The number of articles (or boxes or packages) may then be indicated quickly in a blank column at the edge of the list. As many as a thousand items are often printed in columns. Accuracy requires that a wide space be left between the items to prevent a figure appearing in front of the wrong item on the shipping order and the memorandum. This frequently happens when the items are printed in small type and the carbon paper and sheets slip. If large type is used, it is necessary to decrease the number of items or the sheets will be too large for convenient handling.

FOLLOW-UP *to secure action on claims for goods lost en route or damaged is an important duty of the traffic department—correct routine to follow.*

If the house is unable to fill the order entirely, goods out of stock are reported to the traffic department. The items are entered on a separate slip and the customer notified.

If this shipment is lost, a claim is entered against the

railway in an accurate and unanswerable way.

Instead of filing an original freight receipt bill with the railroad company, a "claim record" (Form III) is filled out, the original of which is kept for the house files, and a carbon sent to the railroad company. The claim is made out from the original of the bill of lading, and in accord with the conditions printed on the back of the bill. The chances of the claim being adjusted on any except a satisfactory basis are small, as no claim of shortage will hold against the original receipt in possession of the company, and which has been signed by the agent for the railroad.

In tracing shipments the receipt is never surrendered to the railroad company. The railroad agent is sent a statement of the shipment as shown by the bill of lading. In case of loss or damage the receipt is attached to claim papers. It often becomes advisable for the house to institute a tracing itself and not leave the matter entirely to the railroad. This is done to expedite the tracing, and show the customer that the house has an interest in his welfare. No forms are used for this separate tracing. If the shipment was made from Chicago to some point in Ohio by the way of Cincinnati, a letter is written to the company in Chicago, the connecting line in Cincinnati, and the agent at the destination.

IN THE *game of business as in the game on the diamond, it is the man who keeps score on results who follows most closely the progress and the profits of his work.*

—John T. Wolff
L. Wolff Manufacturing Company

DIRECTO
Board

XX

OFFICE SHORT CUTS AND ECONOMIES

By Wesley A. Stanger
Sales Manager, Royal Typewriter Company, Chicago Branch

JUST because the loss in an individual instance is small, most managers let little items of office waste go unchecked. They forget that a one-tenth of a cent leak contributed to three times a day by one hundred employees, means a loss at the end of the year of one hundred dollars. Any business man would drop his work and institute a rapid search if you told him that a hundred-dollar bill had been dropped out of his cash drawer into the sweepings. But just because this hundred dollars is dropping out in driblets of one-tenth of a cent he lets it pass, even though the stopping of the leak is easy.

A cashier in a firm that maintained a number of different departments made a practice of entering the amounts coming from each department in a separate and distinct column in his cashbook. There were twenty of these columns; each column represented a department. They occupied four pages a day. He was, therefore, obliged to add up each column and carry the total over on the next page, which meant eighty operations.

An expedient for eliminating these eighty operations was suggested to him, which by its very simplicity had not before occurred to him. The plan was to cut off an inch alternately from the top and from the bottom

of each page, thus leaving the total always in sight when a page was turned. The time saved by this scheme, while considerable in itself, was dwarfed in importance when the errors avoided by the abolition of transcribing were considered.

How many dollars' worth of pins did you buy for your office last year?

You don't know. Neither did Jackson, the head of a business with an office force of a couple of hundred people.

But one day he came quietly round a corner of the office and found two messenger boys pelting each other with pins bought with his money. Then he investigated.

He found that he was buying pins in quarter pound boxes. When a requisition went down from any one of his several hundred employees to the stationer it was for "one box of pins," and that is the way the order was filled. Every desk had a box of pins on or near it and they were usually scattered everywhere. The actual amount of money spent for pins ran into many dollars at the end of the year. If cost could be reduced here it was quite as important as figuring out how sheet metal could be cut to make twenty-one burrs instead of nineteen.

This analytical business man found that the waste occurred as the result of too great an abundance of pins. The solution was to reduce the number issued at each call and to urge economy in using them.

Why not have a private brand of pins? It would call pins to the employees' attention. It would make an excuse for preaching economy. It would impress the firm on their minds.

"How much will 1,000 small boxes like this cost with

our label on the top?" he asked his buyer.

The box was a small slide affair similar to what is generally used for paper clips. In quantities it would cost considerably under a cent, label and all. So the following instructions were given.

"Hereafter buy pins in 100-pound lots, in bulk. If you use several sizes, cut it down to one average size. In this way you are sure to save in the buying. Have 1,000 of these boxes made up and have this label pasted on each of them—

> VERIBEST PINS
>
> Put up especially for
>
> WILKINSON & COMPANY
>
> These pins are put up especially for this firm under our private brand. Employees are urged to keep them in the box and not scatter them about desks or floor. This box contains 250 brass nickeled pins. Everything this firm uses or sells is the best obtainable. DO YOUR PART TO KEEP IT SO.

The boxes were filled by weight. Two hundred and fifty pins were counted for the first weighing; after that the office boys weighed them out and filled the boxes at odd moments. Only one box was issued at a time; the requisitioner always had to bring the old box with him; and the stock clerk jotted down on the back of the box the date issued—so that when it came back to be filled he could see how long the previous 250 had lasted. The pin expense of this office was cut down nearly two-thirds.

One of the largest wholesale dry goods and general

merchandise concerns in the country, using talking machines for correspondence dictation exclusively, has found a subsidiary saving in addition to the recognized advantages.

After a test of the machines the managers of correspondence found that the average letter contained 100 words or thereabout, and that often only two or three letters were dictated on one wax record which was made to accommodate 1,500 words of ordinary dictation. This meant a considerable loss, for the entire cylinder had to be shaved to remove 100 words, trimming it down as much as in removing 1,500 words.

Here was an opportunity. Buying records in quantities of 5,000 at a time, he figured that a loss of seventy-five per cent of wax ran into dollars in the course of a year. He sent out orders to have all records cut into smaller sizes, and instructed correspondents to use the size of cylinder that would accommodate the dictation they desired to give. Thus a 100-word letter went on a record cut into thirds. If a man was going to dictate a string of letters he used full sized records. Before long the system was in general use throughout the various departments and over $500 was saved the next year in the cost of wax records.

The manager of an office force of two hundred got a practical idea from watching the water boy who kept a gang of street railway laborers supplied with drink one morning while his car was temporarily stalled.

When he reached his office he gave instructions to the switchboard girl to keep tab on the number of times employees resorted to the fountain for a drink. He found that the number of trips was about seven hundred and fifty.

Holding his watch to determine the average time

consumed, he learned that the average was about three minutes for each drink. Without figuring the time lost in settling down to work again, he saw that thirty-seven hours each day were given to this unproductive process.

The street railway water boy had suggested a real saving.

When his five-dollar water boy started to make the rounds the next day, many of the employees thought it was a pleasant innovation to have their drinks delivered. Few realized that the water boy was saving almost the equivalent of the office manager's salary for his firm.

"Write on one side of the paper only," was formerly the rule generally given out wherever letters were written. But with the advent of the writing machine it became a general practice and the legend was no longer necessary.

However, like all rules, there are exceptions to it. Here is one of them:

When you make a carbon copy of a letter, write on one side of the letter only, but on both sides of the second sheet. This not only saves paper, but also places all of the record you want to keep on one sheet of paper where you can get it all together. Your files are for your private use, not for outsiders; and when you go to them to find a letter to John Douglas, it is exasperating to find the first sheet of the carbon copy but no trace of the second.

Pens, so the stationer of one large corporation found out, were consumed in his offices at the rate of ten boxes a month. A box of pens contains a gross; thus, in a year, the office consumed almost a "great gross" of pens. He also found that it was carrying an immense variety of pens. Every clerk was furnished with his own

preferred style, and every requisition read "one box of so-and-so pens."

The stationer determined to reduce the pen expense. He sent little slips to each clerk asking for information regarding the pens he preferred, the life of a pen and the use to which he put them. The slip he used was as follows:

PEN CENSUS

Please note below your preference of pens, how many you use and what your second choice is. This information is requested in order to aid the purchasing department in making contracts for the coming year.

Style ..... Number .....

Fine ..... Medium ..... Coarse .....

Pens on hand .....

Second choice .....

Why do you prefer first named pen? .....

.....

Please fill in immediately and hand to mailing clerk.

The result of this "census" was that a big supply of pens of all sorts was found to be in the possession of employees. He found that the majority of writers preferred a certain pen, that the second choice showed but little deviation from this variety and that "freak" requests were almost negligible. Users also changed often, and he had bought gross after gross of pens merely to satisfy a few personal whims of the clerks.

He sent a boy through every department with an order for all pens that were not in actual use. As a result he had a sufficient supply of "freak" pens to last the rest of his life, and at the same time had augmented the stock of goods regularly used.

With this information concerning the pens used during the year, and with the supply that he had collected and the statement of the choice of the users, he had a basis upon which to estimate his purchases. He ordered a sufficient quantity of the styles most demanded, and none of the freak varieties. His orders for pens were thenceforth cut down two-thirds.

He then secured small envelopes similar to "pay envelopes" and printed up a quantity of them as follows:

> This envelope contains six Penman Number 1 steel pens. These pens are carefully selected and should any of them prove defective, the user is requested to report it to the stationer.

On other envelopes he printed blank lines in which the style, number and grades of pens could be filled. These were for miscellaneous pens, which were rarely called for.

At the end of the year, he still had a large supply of pens on hand and had not been called upon to buy more than 35 per cent of the previous year's demands. Pens were 60 cents a gross. He had been spending $72.00 a year. By this system he cut it down to $25.50.

The envelopes and printing for the pens most used (1,000 envelopes) cost $1.10; the 500 envelopes printed for miscellaneous pens cost 85 cents. The slips for the "census" cost only the time of the office boy, for the work was done on the office duplicator. Thus he charged $1.95 to expense for inaugurating the scheme and saved $46.70 on the first year's pen bill.

Few managers have given the matter of rubber bands more than a passing thought. In every business house they actually cut a big figure. Pounds and pounds of

them are shot away by office boys, other pounds are carried home, and still more pounds find their way to the waste basket, while untold numbers of them are used unnecessarily because clerks will put half a dozen bands around a package where one is sufficient. Within the past few years the price of rubber has gone up by leaps and bounds.

Recently a buyer for a firm using quantities of rubber bands sought to reduce the cost and began by adopting a scheme similar to the one used by the man who saved money on pins. Small assortments were placed in small boxes and the bands were issued in that manner, cutting down the waste of them several hundred per cent.

He also tried out a gum tape machine for packages not suited for fastening with rubber bands, and found that the original cost of installing the machine equipped with a mile or so of tape equalled about two pounds of rubber bands; so the machine became permanent. Now the firm uses gum tape machines for all packages going out of the office and for all papers to be stored in the office.

Similarly all labor and equipment processes in the modern office are open to challenge and subject to economy for the shrewd office manager. Simple, standard, direct effort makes for more work, easily done and at low cost.

USUALLY when a man falls short of success, the trouble lies in some specific direction; it may be bad judgment in buying; it may be poor selling methods; it may be improper handling of people. Whatever the fault, I believe men could educate themselves out of it, if they really resolved to do so and went about it intelligently.

—C. D. Peacock
Of C. D. Peacock

DIRECTOR OF INDUSTRIES
Bengal